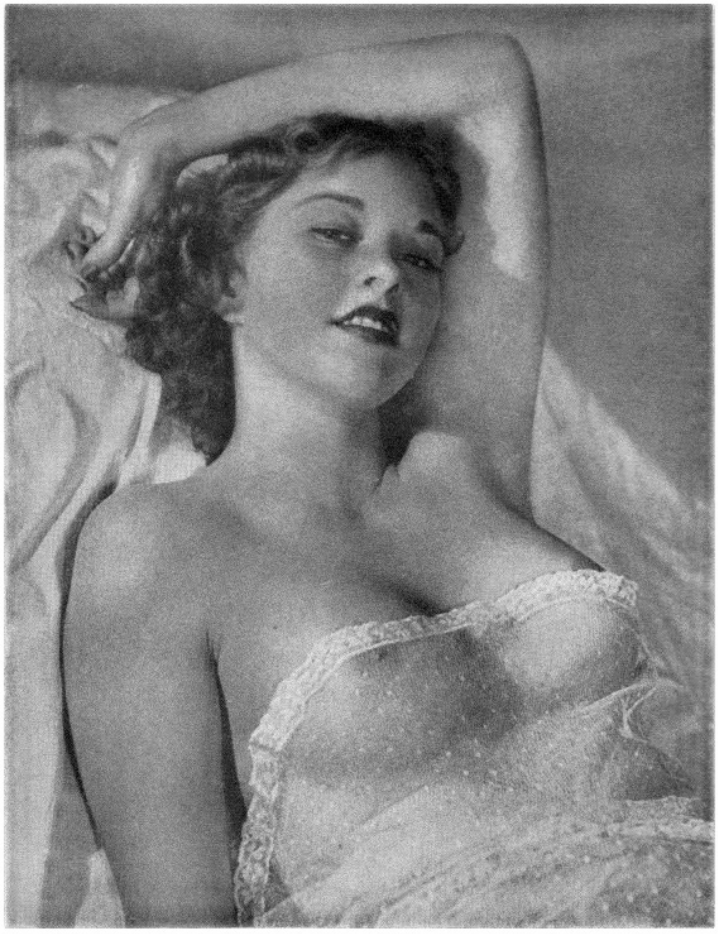

PRINT FINISHING

WILLIAM MORTENSEN

A critical but neglected stage of print making. All the steps from the wash-water to the salon wall, with complete details on the Abraision-Tone Process.

PRINT FINISHING

by

William Mortensen

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Other Books by
WILLIAM MORTENSEN

Projection Control
Pictorial Lighting
Monsters and Madonnas
The Model
The Command to Look

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To George Allen Young
. . . who asked for it.

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Introduction

This book deals with a very important but much neglected phase in the making of a print. This phase begins with the time it emerges limp and dripping from the wash water (Figure 1), and ends with the time it is presented to public view in a portfolio, in a frame, or on salon walls (Figure 2).

Only in one instance have I overstepped these bounds. This is in the case of the brief section on the choice of printing papers. It is obviously necessary to include this material, for finishing procedures are conditioned by the printing papers that are used.

It is strange that this phase of print making should be so much neglected, for at the time the print comes out of the wash water it is rather less than half completed. Yet, at this point, otherwise careful and conscientious workers are apt to abandon the print to fend for itself and to give it only the most perfunctory sort of presentation. This is a very critical period in the photographic process, for pictures are made or spoiled in the finishing. Fine material will go for nothing unless it is properly presented, and clever presentation will often discover unrealized potentialities in what seemed at first glance to be second-rate material.

Lest there be any misunderstanding, let it be clearly understood at the beginning that we are *not* going to talk about any procedures for salvaging bad pictures or recouping on technical blunders. All

finishing methods are postulated on good material, on good lighting, on good exposure, on a good negative, and on a print of good quality. Only when these things are present, should you proceed with the finishing of the print.

Three Stages of Finishing

The print finishing operation naturally divides itself into three stages:

1. Preparation
2. Control
3. Presentation

These three stages form the basis of the plan of this book and the three parts into which it is divided.

The first stage—preparation—consists mostly of fairly simple mechanical procedures. These procedures, however, must be done cleanly and skillfully in order to secure the best results from the more difficult later stages of the finishing operation.

Clean-Up and Control

The second stage of the finishing procedure provides, in its simplest form, a method of getting rid of the small flaws that—even with the most careful workmanship—are apt to appear in the unfinished print. These flaws are such things as dust spots, scratches, pinholes, etc. With the increasing use of the miniature negative, these flaws become increasingly prevalent.

The general method of dealing with such flaws is commonly known, though few amateurs understand how to make the best use of it. And very few realize that by extending and elaborating this method it offers amazing facilities for control.

During the past eighteen years I have gradually evolved a method of print control which I have designated for convenience' sake as the "Abrasion-Tone Process." No new principles are involved in this process; it simply represents a refinement and extension of procedures long known to photographic professionals. In its simplest and most restricted use, Abrasion-Tone is merely a method of refining print quality. But, in skillful hands, extreme control and startling pictorial results are possible.

Figure 1

This process, both in its simple as well as its more extreme applications, forms the basis of Part Two of this book.

I have, up to now, declined to write about the Abrasion-Tone Process, owing to the delicacy of its operations and the difficulty of properly describing them without actual demonstration. And I have felt a genuine reluctance at putting into the hands of the inexperienced amateur a process which is so rich in opportunities for misuse and abuse.

However, due to increasing demand, the process is here made public, but with the reiterated warning that these methods are *not* for the callow and careless amateur: they require a worker of *skill, taste* and *discrimination.*

Presentation of the Print

In the third part of the book we come to a very important phase

Figure 2

of print finishing that—so far as I know—has never received adequate treatment or exposition. This is the matter of Presentation.

Here is a thing about which many photographers, otherwise competent and conscientious, are strangely careless and insensitive. And many pictures never get the "breaks" that they deserve in salons and exhibitions because they are wrongly or ineffectively presented.

There is much, much more to displaying a picture than merely tacking it up on the wall for people to look at. A picture is *not complete* until it is given adequate presentation by proper framing, mounting, etc. Showmanship and (in the broad sense of the word) salesmanship are needed here.

A certain amount of manual skill is required for this phase of print finishing. Much more important are good taste and a sense of the fitness of things. These latter requisites are, of course, vastly harder to acquire than simple manual skill and neatness, but, inherent or acquired, they are a primary part of the equipment of any photographer who aspires to do anything that transcends the snapshot class.

Part One

Preparation

Chapter One

Printing Papers

In beginning with a chapter on papers, I am somewhat transgressing the arbitrary limit I set on myself—that of commencing our consideration of finishing operations with the moment that the print comes out of the wash water. This single violation of the plan is necessitated by the fact that the whole finishing operation is determined all along the line by the qualities of the printing paper involved. Incidentally, we may note that the printing paper is also one of the factors of *presentation*, of which we will speak in Part Three.

In this chapter I shall describe those qualities of printing paper that best adapt it to pictorial purposes and to the methods of print finishing outlined in this book.

The Function of Printing Paper

In order to establish some sort of basis for our criticism of printing papers, let us first give a little thought to the basic *function* of the paper in the business of making and finishing a print. Just what part does the printing paper play in the completed picture?

Basically, the paper is nothing but the *passive support* upon

which the picture is imprinted. By itself the paper means nothing: it is significant only because it serves to display the print.

This may seem too obvious a point to emphasize so heavily. But it is, unhappily, a point which is too often forgotten—to the great detriment of the picture.

Since the business of the printing paper is to serve merely as the passive support for the picture, it follows that any certain quality or peculiarity that draws attention to the paper itself—is bad. So any details of color, texture or surface that serve to make the paper conspicuous—no matter how admirable they may be in themselves—should be avoided. Children (we are informed on good authority) should be seen but not heard. A good printing paper should not even be seen. The picture should be seen—and the paper taken for granted.

Futile Complication

Application of this principle will do much to simplify the problems of the amateur who must make a choice of printing material from the staggering complexity of material that confronts him. There are perhaps a dozen leading manufacturers each of whom is making several different brands of bromide paper. All these brands are made in all conceivable variations of contrast, color, texture, surface and weight. The makers ring all the possible changes and permutations of these items. The result is an exuberant multiplication of varieties, sub-varieties, and sub-sub-varieties of printing paper that makes the vital statistics of guinea pigs look very restrained indeed.

This complication is really of no significance to the pictorialist. Most of the papers on the manufacturers' lists are for specialized technical or commercial use and have no bearing at all on pictorial problems. When these are eliminated from consideration, the problem becomes appreciably simpler. And now a little intelligent application of the principle mentioned in the foregoing section (that paper is merely the *passive* support for the picture) will serve to cut the once colossal lists to very modest dimensions.

Paper Specifications

Bromide paper is usually listed according to five different bases of classification—contrast, weight, color, surface and texture. I will observe this same classification in making my recommendations.

1. Contrast. A paper of normal or medium contrast should be used. This of course assumes that your negative is correct in quality.* No one should attempt to make a picture from a faulty negative.
2. Weight. A paper of medium or double weight is recommended.
3. Color. Ninety per cent of all pictorial subjects demand nothing but *white* paper. With a few *genre* subjects an ivory stock may be used. Any more conspicuous color should be avoided.
4. Texture. A somewhat rough surface is often pleasing with pictorial subjects. But any sort of obvious pattern or texture in the paper is bad. Therefore, discard (as far as pictorial use is concerned) all linens, canvases and other fancy textures. These fancy textures directly violate the first principle that we laid down above—that a good printing paper should not be conspicuously seen, but simply taken for granted.
5. Surface. For most pictorial subjects a matt surface is preferable. There is a certain restricted field of subject matter, however, that is best represented on a glossy surface. For the control methods described in Part Two a matt surface is essential.

Use of Glossy Paper

Glossy stock is apt to be associated in the mind with very crass and crude commercial work. But it has definite pictorial uses. Glossy paper is demanded, for example, by certain sorts of crisp and brilliant

*For exposition of negative quality see Projection Control (Chapter Three) and Pictorial Lighting (Chapter Four).

material—such material as that exploited by the "F:64" group and other so-called photographic "purists."

Glossy paper is suggested if the effect of the subject material depends on the quality of the texture and detail rendering—and *not* on mass, line or atmosphere. An Ansel Adams snow scene, for instance, would be absurd on matt paper. Just as absurd would be a Misonne subject on glossy paper.

Detail rendering, such as that exploited by glossy paper, is only to be secured from a fairly large negative. Therefore, a miniature camera owner will have little occasion to make "glossies."

Chapter Two

Drying

The first preparatory step in the finishing of a print is the drying process. While the wet print is no such tender customer as the negative in the same stage, it requires reasonably careful handling.

In a word—the best way to dry a print is—to dry it. There is no need for any ceremony, complication or expensive apparatus. The average amateur has no more need for electrical or mechanical drying gadgets than he has for a hundred-gallon tank to wash his prints in. Leave commercial devices to the commercial men.

Procedure

Before putting the prints to dry, they should each be swabbed gently on both sides to remove any surface water. Use for this purpose a viscose sponge or a soft, lintless cloth. Unless this surface water is swabbed off, it will collect to form little puddles on the drying print. These puddles leave their mark on the print in the form of unsightly bulges which are almost impossible to eliminate. This swabbing also materially reduces the drying time.

As to the manner of drying, this may be largely determined by the needs and facilities of the individual. If you make only a few prints at a time, you may dry them, as many amateurs do, face down on clean, white blotting paper.

At one time, for a period of nearly a year, owing to lack of laboratory facilities, I laid my prints out to dry on the rug of the front room. During this period, I carried on quite a large and profitable portrait business.

However, if you are apt to be turning out a good many prints at a time, such a print dryer as that illustrated in Figure 3 will prove the most satisfactory. At the same time, it is very cheap and simple to construct. It consists of a rack of square wooden frames, three feet by three feet, covered with fine mesh galvanized chicken wire. The wire is painted so as to protect the prints from any metallic stains. The frames are about nine inches apart in the rack, and rest loosely on cleats so that they may be removed if desired.

Some prefer to cover the frames with cheesecloth or muslin, but I have found that the chicken wire is much more durable and dries the prints more quickly.

Drying Glossy Prints

The drying rack described above serves for proofs and matt prints. Glossy prints are more difficult to handle and require more particular treatment.

To secure the utmost brilliance from glossy prints, they should be "ferrotyped." This is done by drying them face downward on enameled or Japanned tins. The ferrotype tins, if neglected, are rather subject to rust or corrosion, so they should be rubbed up once in a while with a slightly oily cloth.

The general procedure of ferrotyping is as follows:

1. Clean the ferrotype tin carefully.
2. After washing the print, put it through a bath consisting of 32 oz. of water, 1 teaspoon ($\frac{1}{8}$ oz.) of "Feroline," and 1 oz. of glycerin.
3. Lay the wet print face downward on the tin and press it gently into contact with a soft rubber roller. Roll from the center toward the corners, so as to eliminate all bubbles or bulges. It is best to use a roller for this purpose, not a flat squeegee. (Those who do a large

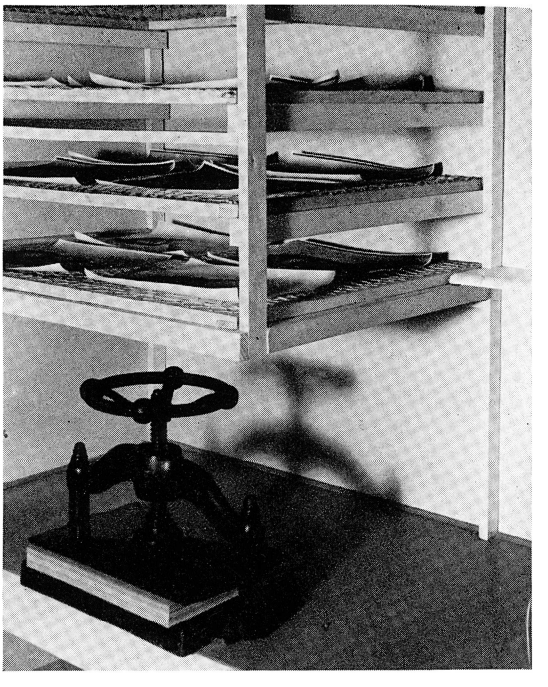

Figure 3

The drying rack consists of wooden frames covered with chicken wire.

amount of ferrotyping may prefer to use a wringer. In this case the print and tin are run through the wringer together.)

4. Swab all excess water from the back.
5. When the print has dried, it will loosen sufficiently at the corners so that you may readily strip it from the tin.

Failure of ferrotyping, which causes the print to stick so tightly to the tin that it cannot be detached without damage, is probably due to one of three causes:

1. Dirty or corroded tins.
2. Failure to use a bath such as that described in section 2 above.
3. Too heavy a hand with the roller. (The print should be merely *smoothed* into place.)

Chapter Three

Flattening the Print

The unequal drying of the gelatin emulsion and the paper backing always causes the print to curl somewhat while it dries. It is necessary to straighten and flatten the print before it can be worked on and properly mounted. There are two stages in the straightening process—straight-edging and pressing.

Straight-Edging

A print should not be absolutely bone dry at the time it is straightened. While it appears dry, it should contain a small residue of moisture. A print that is too dry is harder to straighten and is more liable to damage. Rather than try to work with a print that has gone too dry, dip it in the wash water and dry it over again.

The object of straight-edging is to take the curl out of prints so that they may be completely flattened in the press. There are two methods of straight-edging in common use. One consists of pulling the print, held face down, under the sharp edge of a ruler. The other method consists of pulling the print over the edge of a table or workbench. The latter method, which I shall describe, is the one that I prefer, since it does not require the use of any auxiliary gadget.

The table to be used should have a straight, square edge. Lay the

Figure 4
Beginning operations of straight edging. Left hand is pressed down firmly.

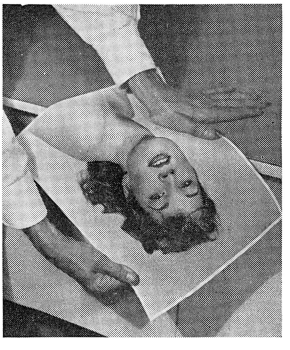

Figure 5
Midway in straight edging. Note how left hand follows print over edge.

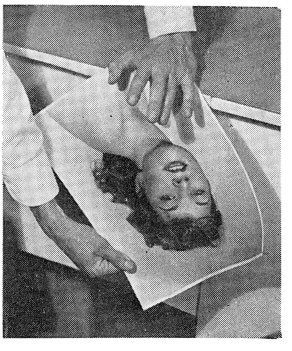

Figure 6
Completion of straight edging operation. Movement should be steady and uninterrupted to avoid creasing.

print on the table, face upward. Grasp one corner of the print with the right hand and lay the flat of the left hand firmly on the face of the print. Now, with the right hand, pull the print downward across the edge of the table. At the same time, let the left hand follow and guide the print. Figures 4, 5 and 6 show three successive stages of the operation—at the beginning, the middle and the end. Note carefully the way in which the firmly pressed left hand follows the print around the edge. Failure to do this may result in tearing the print. The movement should be steady and continuous: hesitating or stopping part way through will produce creases which cannot be removed.

This operation is repeated four times with each print, working from all four corners.

Pressing

When straight-edged, the print goes into the press for final flattening.

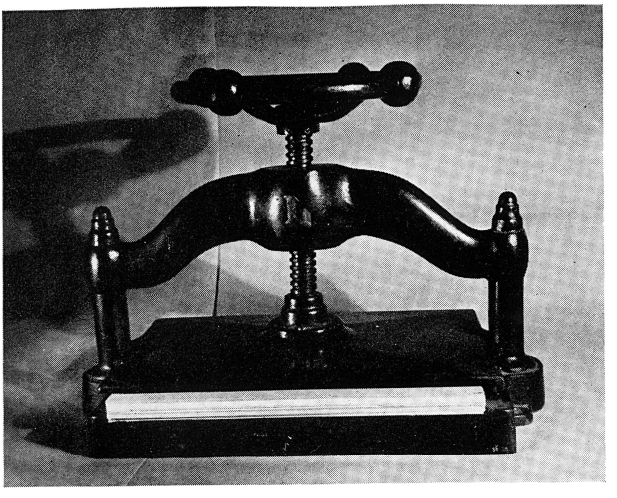

Figure 7
An old letter copying press is best for flattening prints.

Although there are numerous cheaper contraptions, a press of the type illustrated in Figure 7 is the only satisfactory sort. Eastman manufactures such a press for about twenty dollars; but if you are fortunate enough to find an old letter copying press in a second-hand shop, you may manage to equip yourself much more cheaply. The bed-plate of the press should not be smaller than eleven by fourteen inches.

Before being placed in the press the prints should be made into a "sandwich" between two pieces of heavy chip-board. Use plenty of pressure. Cinch down the press as tight as conveniently possible. Operation of the press is much facilitated if it is screwed to the table.

Prints should be left in the press for at least three hours.

This completes the preparatory stage of print finishing. When the print comes out of the press it is ready to undergo the Clean-Up and Control procedures.

Part Two

Methods of Print Control

Chapter One

Preliminaries

At this stage of things, you now have a print that is properly dried, flattened and pressed.

Since you have troubled to put it through all these processes, we will assume that it is of reasonably good technical quality. It is correctly printed and developed, and is free from all gross blunders such as stains and severe scratches. Yet, if you are human, there will probably be many things about this technically good print that you would like to see altered. There may be distracting or irrelevant elements in the background. There may be unfortunate imperfections of the skin, misplaced wisps of hair, or wrongly turned garment folds, things which in the subject itself are unimportant and scarcely noticeable, which are nevertheless destructive of picture values.

In the next eight chapters I will discuss a control method for dealing with these things.

Almost as old as photography itself is the desire for some sort of control. Scarcely a picture has ever been taken that did not show, in its rough proof form, the need of some simple adjustment that would immediately make it a better picture. Accidental circumstances of

time and place have a way, in photographs, of usurping an altogether disproportionate amount of attention. Little things, quite unnoticed when the picture was taken, assume, in the finished print, a ridiculous importance. That bit of landscape, for example, was so lovely that you really didn't notice the telephone pole; but there it is, in your proof, ugly and assertive. And, for another instance, when you took that picture of Mary Jane, she seemed to you much the loveliest of God's creatures; but the camera cynically points out that she is extremely freckled and has a pimple on her cheek.

Now, accidental circumstances like freckles or telephone poles are really a libel on the subject matter, for they vitiate your original pictorial intent. You really saw pictorial possibilities in the landscape or in Mary Jane; but these disagreeable details prevented you from realizing them. Try as we may, we can't get the camera to see things as we see them.

For many years, the standard way of making such changes and alterations has been by means of retouching on the negative. For the amateur, however, retouching on the negative is both difficult and tedious, and involves a very specialized sort of skill that he is not likely to care to acquire. Even in skillful hands, such retouching of the negative is subject to severe limitations. Little can be done by this means toward improving gradation or widening the half-tone range. And on the *miniature* negative, of course, any sort of extensive retouching is quite out of the question. Since most pictorial work nowadays is being done with the miniature camera, this limitation puts negative retouching out of the running as far as any sort of use in amateur or pictorial work is concerned.

Another way of achieving such changes and elimination involves the use of some one of the "control processes"—such as Paper Negative or Bromoil Transfer. These processes are, however, rather round-about means of attaining the desired control, and, in the case of Bromoil Transfer, much too expensive for the average amateur to indulge in.

By far the most reasonable and readily comprehended means of control is *direct control* by work on the print itself. The advantages

of being able to work in terms of the *positive* are obvious. Only the most experienced retoucher is able to work with sureness in terms of negative values. It has the further advantage that, when well done, it is absolutely photographic in effect. Even with good retouching of the negative, it is obvious, upon inspection of the print, that there is a departure from good photographic quality.*

The Abrasion-Tone Process

In the following chapters I shall describe the method of print control which I have called the Abrasion-Tone Process. It is a process which I have evolved and perfected over a period of a good many years and which I have used in many of my own pictures. The process involves no new principles; it merely extends, improves and combines familiar professional procedures. In its most restricted use, Abrasion-Tone is simply a method for refining print quality. However, when desired, extreme control and startling pictorial results are possible.

Abrasion-Tone is postulated on the best of negative and print quality. It must *not* be thought of as a means for correcting or covering up technical shortcomings. When negative and print quality are good, one may accomplish results with this process beyond the attainment of any lens or equipment.

Uses of Abrasion-Tone

The various uses of the Abrasion-Tone procedure may be briefly summarized as follows:

1. Elimination of flaws and unwanted detail.
2. Alteration of detail.
3. Improvement of gradation.
4. Improvement of definition.
5. Dramatic emphasis for pictorial effect.

Careful comparison of Figure 8 and Figure 9 will show the type of control and extent of improvement that may be effected on a print by a skilled worker.

*Photographers of the old school are apt to raise the issue of legitimacy at this point. This of course is ridiculous. There is no greater departure from strict photographic procedure involved in applying control to a print than there is in retouching a negative. If you are going to raise the issue of purity in photography, be pure throughout your procedure, and eschew negative retouching equally with other control methods.

Figure 8. Original condition of print.

Figure 9. Print after application of Abrasion-Tone Process.

All the above-listed uses of Abrasion-Tone will be demonstrated in the course of the chapters to follow. In the first chapters I will limit myself to the use of the process in connection with portrait material. A later chapter will deal with its application to landscape and complicated pictorial set-ups.

Materials for Abrasion-Tone

The materials for Abrasion-Tone are quite inexpensive. The full set hereafter listed should not cost you more than three dollars. Do not attempt to use any substitutes or makeshifts. The fitness of these materials for the process has been established by many years of experimentation and elimination. Please try to follow all directions in these articles explicitly and exactly. Until you have the process well under control, do not try to introduce any experimental variations of your own. All methods herein described are practicable and workable, for I have been working them myself for many years.

Here are the materials (Figure 10) for the Abrasion-Tone Process:

1. Toning Powder. This is made from A. W. Faber's "Castell" Polychromos Chalks. These come in a small box of thirteen chalks for ninety cents. Use only the ivory black (#45) and burnt sienna (#60) crayons. Powder these by rubbing them over a piece of fine sandpaper. Mix them in the proportion of two parts of black to one of burnt sienna. Keep the powder in a small flat box.
2. One stick of Chinese ink.
3. One Wolff's B.B. Carbon Drawing Pencil. Don't try to use any other sort of pencil for this process.
4. Valet safety razor blades. These must be new and unused.
5. Powdered pumice. A one- or two-ounce carton is a convenient size. Punch a number of small holes in the top of the carton, so that the powder may be shaken out.
6. Absorbent cotton.

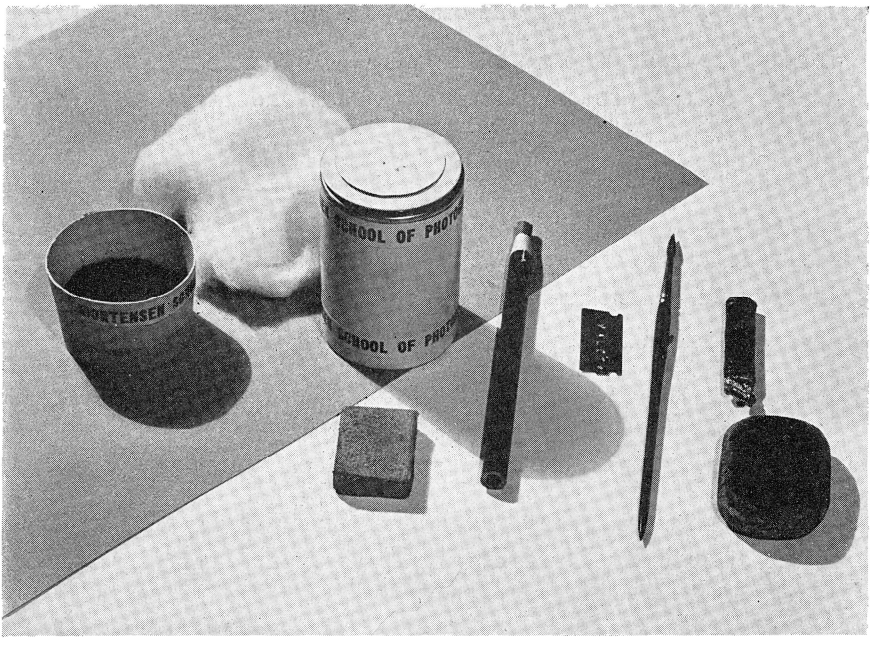

Figure 10. The materials for Abrasion-Tone are small in number and relatively inexpensive.

7. One two-and-a-half inch paint brush.
8. One #4 round sable brush. The Devoe & Reynolds Albata 822 is recommended. A sable brush is necessary; camel's hair will not serve.
9. A kneaded eraser. Get the ten-cent size.
10. A pencil eraser. Any good pencil eraser will serve, but, if much work is being done, it will be more convenient to have the Blaisdell Eraser No. 535-T.

Preparation of Print for Abrasion-Tone

The print to which Abrasion-Tone is applied should be derived from a negative of good technical quality, correctly exposed and well lighted. The picture used for purposes of demonstration in the following four chapters exemplifies the Basic Light. But, as we shall see in Chapter Seven, the process may also be applied, with certain

variations, to pictures using the Plastic or Dynamic types of lighting.*

The print should be an enlargement, of course. To obtain full advantage of the process, the enlargement should be of fair size, preferably not smaller than eight-by-ten.

The enlargement should be made on a *smooth, matt paper*, white or ivory. The three manufacturers,—Eastman, Defender and Agfa-Ansco—each make one grade of paper which is particularly adapted to this process. These are, respectively:

Eastman Portrait Proofing Paper, matt.

Defender Velour Black I.

Agfa Brovira 7051 (soft) or 7052 (normal).

Gloss, semi-gloss or luster papers should not be used.**

It is essential that the emulsion of the paper be well hardened during or after fixing. The following Hypo formula contains sufficient hardener for the purpose:

HYPO

Powdered Hypo	2 lbs.
Water	1 gal.

In separate container, mix in given order:

Sodium Sulphite	1 oz.
99 p.c. Acetic Acid	1½ ozs.
White Alum	2 ozs.
Water	4 ozs.

Add slowly to Hypo solution.

Unless the emulsion is thoroughly toughened, it will not stand up under the Abrasion process.

After hardening, the print must be well washed, thoroughly dried and straightened before it is ready for working on.

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*For explanation of these terms, see Pictorial Lighting, Chapters Three and Six.

**These three papers are carefully chosen for their adaptability to Abrasion-Tone. One of these papers should be used while you are learning the process. With increasing skill, you will find that there are a few other surfaces that you can make use of. Among these is the recent Eastman Kodalure R, a beautiful paper with a hint of luster. It may be successfully adapted to Abrasion—but not until you have thoroughly mastered the process.

Chapter Two

Use of the Powder Tone

For the purpose of demonstrating the Abrasion-Tone Process, I will assume that you have a print conforming to the following conditions, and of subject material somewhat similar to Figure 8.

1. The print must be from a negative of *good technical quality.*
2. *Basic Lighting* is preferable.*
3. The print must be an enlargement, *not smaller than eight-by-ten.*
4. The enlargement must be made on *white matt* paper.
5. The emulsion of the paper must be well *hardened* during or after fixing.

Place the print before you on a well-lighted, uncluttered table, with ample elbow room, and with your materials for Abrasion-Tone arranged within convenient reach. A table or desk with a slight *slant* is much easier to work on, since you are not obliged to hang over it to reach the upper edge of the print.

*Pictorial Lighting, Chapter Three.

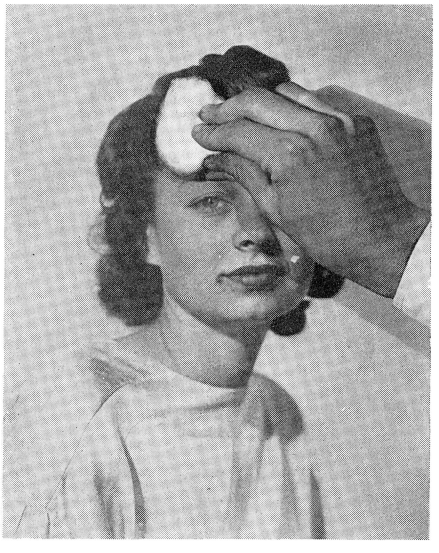

Figure 11. Spread toning powder in circular strokes over entire surface of print. Use powder sparingly.

Figure 12. Wipe off excess powder with fresh wad of cotton.

In examining Figure 8 you will notice various faults. Although there is good gradation here in the middle tones, the print as a whole lacks brilliance and punch. There are numerous untidy wisps of hair. Unfortunate shadows give a sulky expression to the lips. The ear is too white, where the sun-tan failed to cover. The eyes lack brilliance and show multiple highlights. There are numerous small skin abrasions. There are several dust spots and a pinhole in evidence. And there is a large white spot caused by a bit of gelatin sticking to the negative. All these and other faults must be corrected before the print can pass muster as a picture.

The first step is the application of the Powder Tone. Take a medium-sized wad of cotton and dip it lightly into the box of powder. Dust off any excess powder and rub the cotton with circular strokes

Figure 13. With kneaded eraser broadly clear out tone from light areas of print.

Figure 14. Also clear out tone in background near head.

over the entire area of the print, beginning with the face and spreading clear to the corners (Figure 11). The powder must be *very sparingly* used. The print at this stage should have acquired an even and slight warmish tone all over it, but should not be noticeably darker.

With a fresh wad of cotton wipe the surface of the print, removing as much of the tone as possible without scrubbing (Figure 12).

Now, with the kneaded eraser, remove the tone from the light areas of the print—the forehead, the bridge of the nose, the bulge of the cheeks, the tip of the chin, the front of the dress, etc. Don't be niggling or precise at this stage. Work with broad sweeps of the eraser, merely cleaning up the general areas. This will leave a sharp line of demarcation between the tone and the cleaned areas (Figure

Figure 15. Sprinkle pumice lightly over cleaned areas.

Figure 16. With a small wad of cotton, use pumice to blend edges of cleaned areas.

13). Also clean out a small area of the background near the head (Figure 14).

Now, sprinkle a small amount of pumice over these cleaned areas (Figure 15). With a small wad of cotton, and using the pumice as a blending agent, rub along the edges of the cleaned areas until a smooth blend and even gradation is produced (Figure 16).

You will, by this blending process, have once more veiled over the light areas with tone. So we go to work again with the kneaded eraser. But this time clean up only the very lightest half-tones within the light-areas (Figure 17). Blend again, very delicately, with pumice, if necessary.

You will at this stage have added several half-tones to the range

Figure 17. With kneaded eraser, clean up lightest half-tones within light-area.

Figure 18. Use pencil eraser to emphasize the small crisp highlight accents.

of the picture. Now, with the pencil eraser, add the final crisp accents in the very brightest areas (Figure 18). By this means you add one more half-tone.

Now, with the large paint brush, sweep off all the debris, consisting chiefly of eraser crumbs and grains of pumice (Figure 19).

The Powder-Tone: Summary

This completes the application of the Powder-Tone, the first stage of the process. Let me now summarize the uses of the Tone, and mention certain precautions regarding its use.

Two things are accomplished by the use of the Tone:

1. It imparts a slight walnut-brown warmth to the print.
2. By removing the Tone from the light-area and leaving it in the lower half-tones, the half-tone range of the

Figure 19
Brush off eraser crumbs and grains of pumice.

print is widened—thus increasing the impression of plasticity.

The following precautions should be observed in employing the Powder-Tone:

1. Always use the Tone sparingly. An excess of the Tone will make a smudgy irreparable mess of your print.
2. *Never* use the Tone as a local coloring agent; e.g., by putting it on the face and leaving the background untoned. Use it only as a *general* tone. It must be allowed to remain only where there is already silver deposit on the print.
3. Avoid touching the surface of a toned print with your fingers, particularly if your hands are inclined to perspire.

Chapter Three

Use of the Carbon Pencil

The next stage of the Abrasion-Tone Process involves principally the use of the Wolff BB Carbon Pencil. Let me reiterate that no other type of pencil will serve for this purpose—particularly not a lead pencil, which is gray instead of black in tone and leaves a shine on the paper.

The carbon pencil is, in general, employed for darkening larger areas and for securing more tone in the deeper half-tones. In Figure 8, for example, work with the pencil is called for in the orbits of the eyes, along the hairline, and to supply more tone on the curve of the cheek.

The pencil is used in broad sweeping strokes. Notice, in Figure 20, the method of applying it over the orbits of the eyes. No attempt is made here to blend or work smoothly.

For blending we once more use a little pumice on a small wad of cotton (Figure 21). Rub this gently over the penciled area until an even gradation of tone is secured. If you find that the highlight within the penciled area has been too much subdued, give it added pungency with the pencil eraser (Figure 22), blending in again with pumice.

The Carbon Pencil: Summary

This completes the use of the Carbon Pencil, which is the second stage of the Abrasion-Tone Process. Let me now summarize the usual applications of the pencil to an ordinary portrait problem.

Figure 20. Apply carbon pencil in broad sweeping strokes.

Figure 21. Blend carbon tone with a little pumice on a wad of cotton.

1. Darkening orbits of eyes. This use we have already noted above.
2. Filling in larger "traps" in hair and drapery. Unless the hair is very carefully arranged close to the head, the camera is apt to reveal loops of hair, dark against the white background. These enclosed white patches are very unpleasant and distracting elements and require to be darkened.
3. Restoring lost contours. Certain types of lighting fail to make sufficient separation between the line of the cheek and the white of the background. By the pencil this faint or absent contour may be strengthened or restored.
4. Adding "bloom" to cheek. A little additional tone on the curve of the cheek gives the impression of warm blood beneath the skin, and creates an illusion of skin

Figure 22
Restore highlights with pencil eraser.

texture without unpleasant literal detail.

5. Balancing the tone of the background. It is a not infrequent fault of pictures that one side of the background is more brightly lighted than the other. This inequality may be corrected by careful use of the pencil tone.
6. White ears. The prevalence of sun-tan and bathing caps frequently brings you sitters whose ears are much whiter than their faces. A freak of lighting will occasionally create the same effect. White ears may be readily corrected by a little additional tone from the pencil.
7. White hair-line. The same causes contribute to produce a pale strip of skin along the juncture of the hair with the forehead. A little pencil tone, carefully blended, will fill in this strip.

One general principle should guide you in your use of the Carbon Pencil: Bear in mind always that, in the Abrasion-Tone Process, the pencil is not a means for drawing or working in line, but simply a means for adding more tone where desired.

Figure 20. Apply carbon pencil in broad sweeping strokes.

Figure 21. Blend carbon tone with a little pumice on a wad of cotton.

1. Darkening orbits of eyes. This use we have already noted above.
2. Filling in larger "traps" in hair and drapery. Unless the hair is very carefully arranged close to the head, the camera is apt to reveal loops of hair, dark against the white background. These enclosed white patches are very unpleasant and distracting elements and require to be darkened.
3. Restoring lost contours. Certain types of lighting fail to make sufficient separation between the line of the cheek and the white of the background. By the pencil this faint or absent contour may be strengthened or restored.
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Figure 22
Restore highlights with pencil eraser.

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One general principle should guide you in your use of the Carbon Pencil: Bear in mind always that, in the Abrasion-Tone Process, the pencil is not a means for drawing or working in line, but simply a means for adding more tone where desired.

Chapter Four

Use of the Blade

The next stage of the process is concerned with abrasion and involves the use of the razor blade. You will notice that I specify the Valet safety razor blade. In the course of my experiments I have tried dozens of other tools for this purpose, from etching knives to dentist's drills; but I have found nothing that served my purpose so well as this humble and easily secured article.

Aside from its cheapness and convenience, two practical reasons cause me to prefer the razor blade to any other device.

1. The resiliency of the blade adds greatly to the ease of handling it.
2. The fact that the blade is held and directly operated by the fingers makes it much more responsive and flexible in operation.

More than any other part of the process, the use of the blade calls for the acquirement of a specialized manual skill. Unless you are willing to take the time and exercise the patience necessary to acquire this skill, you can never accomplish anything with the Abrasion-Tone Process.

The general use of the blade is to remove, by means of a delicate scraping operation, chosen portions of the silver deposit in the print. By this means you are enabled to locally lighten the tone, to smooth

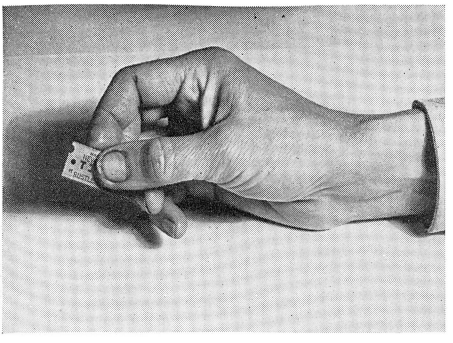

Figure 23. Hold blade between thumb and forefinger, bracing it against the third finger.

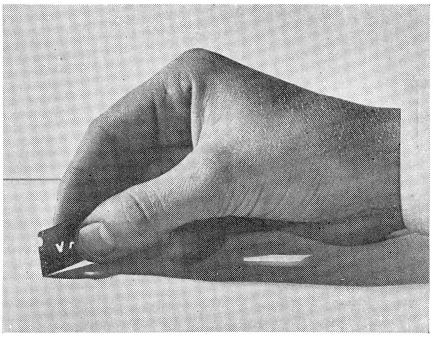

Figure 24. The weight of the hand rests on the ball of the wrist.

out imperfections, and to eliminate objectionable detail. But unless you know *exactly* how to handle the blade, you will speedily make hash out of your print.

Handling the Blade

Owing to the delicacy of the procedure and the special skill required, I am obliged to go into rather precise and specific detail about the mechanics of holding the blade and the method of operating it. Please try to follow the instructions *explicitly*, without any experimental deviations of your own.

The blade is held between the thumb and first finger and is braced against the third or ring finger. The first, second and third fingers are kept in close contact (see Figure 23). The blade is grasped at a point about one-third of its length from the end, so that one-third of the blade projects beyond the thumb and first finger. Hold the blade firmly, but *don't clutch* it. To get good action with the blade there must be relaxation rather than tenseness.

Now, with the blade so held, lay the entire forearm *relaxed* on the table and print. The principal weight of the arm should rest on the ball of the wrist—the bony protuberance on the little finger side of the hand (Figure 24). Be sure you feel the weight resting on this point. Then turn the hand over until the blade rests against the print

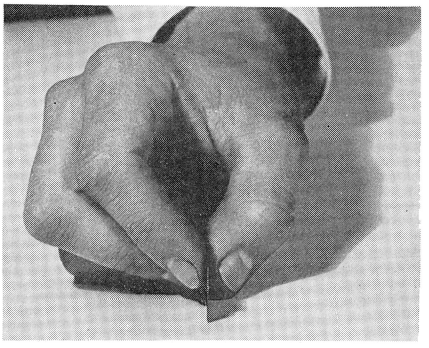

Figure 25. Keep plane of blade perpendicular to surface of print.

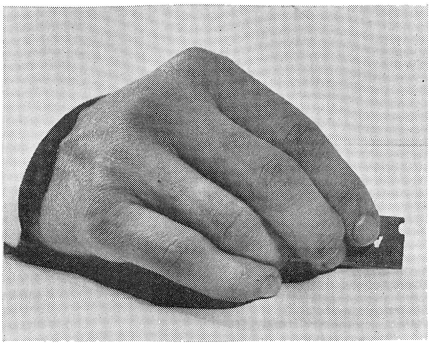

Figure 26. The edge of the blade is inclined at an angle of about 15 degrees.

in such a way that the plane of the blade is perpendicular with the print (Figure 25). At the same time, the edge of the blade should be inclined at an angle of about 15 degrees (Figure 26).

Now, without moving the forearm, and with the corner of the blade resting delicately on the print, cause your hand to oscillate, rotating it on the fulcrum of the ball of the wrist—where, you will remember, the principal weight of the arm should rest. Until you get the hang of the procedure, let the blade cut only in one direction —preferably away from you. The cutting stroke should not be more than one-eighth of an inch in length.

If you succeed in getting tiny crumbs of emulsion from the surface of the print without any gouging, the blade is held right and you are cutting correctly. If, on the other hand, when cutting away from you, your blade digs and gouges into the paper, it is held wrong, and is sloped toward you instead of being kept at right angles to the print. If, however, your blade refuses to cut and merely polishes the paper, you may be sure that your blade is sloped away from you.

You will undoubtedly have to put in many hours of practice before you really get the knack and "feel" of the blade and come to realize the importance of having the correct cutting angle. Needless to say, until you begin to understand the blade, you should limit your practice to old and discarded prints. Don't be discouraged if you

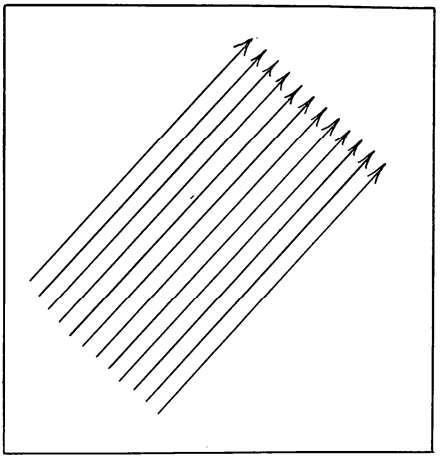

Figure 27
The blade should cut in a series of short parallel strokes.

have to hack and gouge a good many of these before you get your blade to cutting smoothly and delicately. The hang of the thing will come to you suddenly, and you will say: "Why, of course. How perfectly simple."

The next step is learning how to *cover a passage.* Obviously, if you continue cutting at one spot you will presently cut too deep. So, while cutting, learn to move the blade in and out by slightly contracting or extending the fingers. This results in a series of little strokes parallel to each other (see Figure 27). In this manner, the tone over the entire small area is equally reduced.

You will probably find it more natural at first to cut away from you. With increasing proficiency in the use of the blade, you will learn to cut toward you also, and to cut in both directions at once. You will occasionally find it useful, in covering large passages of tone, to lengthen the cutting stroke up to one-half or three-quarters of an inch. But, for most purposes, it is best to use the short, well-controlled stroke that I have suggested above.

The plane of the blade must *always* be kept at *right angles* to the surface of the print. And, for nearly all purposes, the rear corner of the blade should be lifted till the edge of the blade slopes at an angle of fifteen degrees. A smaller angle may cause the blade to get out of

Figure 28. Clean up spots and skin abrasions by use of blade.

Figure 29. Lighten and modify nose shadow.

control and scrape out a large area at once, while a larger angle may cause the blade to gouge.

In one special case, however, it is permissible to increase the angle of the edge somewhat. This is in dealing with small black spots—the result of pinholes in the negative emulsion. To remove such a spot, increase the angle of the edge of the blade to twenty or twenty-five degrees, and then cut both ways with a delicate trembling action of the hand.

When removing or modifying a line or lightening a shadow passage, always let the strokes of the blade follow the general direction of the line or passage. Never work across a line.

The action of the blade will scrape off tiny crumbs of emulsion from the surface of the paper. Never clear away these crumbs by brushing the print with your fingers. *Blow* them off instead. Brushing with your fingers is liable to smudge the tone that you have already applied. Remember to touch the surface of the print as little as possible. If your hands are apt to perspire, it is best, when using the blade or spotting brush, to protect the print from damage

Figure 30. Remove wrinkles in neck and soften seam on dress.

Figure 31. Lighten the whites of the eyes. Be careful to retain modelling and gradation of the eyeball.

by resting your hand on a blotter or a piece of paper.

Application of Blade

Let us now observe how we use the blade to deal with the concrete portrait problem we have undertaken (Figure 8).

First, clean up the skin abrasions near the corner of the mouth (Figure 28). Then reduce the shadows in the lower lip and nose (Figure 29). The nose shadow should be almost completely removed. Also slightly modify the shadow on the side of the nose so as to make the nose look straighter.

Take out the wrinkles on the side of the neck, and break up the insistent line of the seam fold on the shoulder (Figure 30).

Lighten the whites of the eyes (Figure 31). Don't whiten them clear to the corners, however. Keep the natural gradation in the eyeball. A frequent abuse of the blade is to completely clean up the whites of the eyes so that they look like white glass marbles. Also intensify a single highlight in each eye. In putting in these high-

lights, it is permissible to gouge slightly with the blade, so that you can get clear down to the white paper. Also reduce somewhat any excessively dense shadows within the orbits.

Remove the awkward corner of the right eyebrow. Remove the small scar and other abrasions on forehead. Clean out slight highlights on each cheek bone and somewhat reduce the shadows under the eyes.

In general, in working up a print with the blade, remember to work on the print *as a whole.* Do not fix up a small area completely before you go on to the next. This will give you very uneven results and a tight and smug-looking print.

The Blade: Summary

This completes the use of the blade, which is the third stage in the Abrasion-Tone Process. Let us now briefly summarize the most frequent applications of the blade to a portrait problem:

1. Taking out confused or extraneous strands of hair.
2. Cleaning up the whites of the eyes. (But, in doing so, be sure to retain the gradation and modeling of the eyeball.)
3. Whitening the teeth. (Again guard against overuse of the blade. Teeth that are too much whitened look as though they were made of china.)
4. Lighten shadow passages that are too dark or opaque.
5. Making slight structural alterations: for example, lifting the lips or reducing the jaw line.
6. Intensifying highlights.
7. Placing the "bead" in the eyes by gouging.
8. Removing skin abrasions, freckles, etc.
9. Breaking up overlapping lines of texture (when Texture Matrix is used).*
10. Removing pinhole spots.
11. Modifying or removing wrinkles in forehead or neck.
12. Modifying or removing objectionable or over-insistent folds or creases in drapery.

*See Appendix.

Chapter Five

Use of the Spotting Brush

We now come to the fourth stage of the process. This involves the use of the Chinese ink and the spotting brush.

Preparation of Ink

The Chinese ink is prepared for use by grinding the stick against a small stone slab or against the thumbnail of the left hand. The ink is then picked up and applied by the moistened sable brush.

Those of a sanitary turn of mind may prefer to use a little pot of water to wet their brushes, but personally I prefer and advocate the more natural and convenient source of moisture—the saliva. Aside from its convenience, it has the further advantage that the small amount of albuminous matter in the saliva serves as a binding agent, as glue or egg is used in the tempera medium. There is no possibility of toxic action from the ink. Chinese ink consists simply of charcoal derived from the hulls of the black walnut.

General Procedure

Let me outline the general procedure followed in spotting a print.

First, load your brush with all the moisture it will carry. Then thoroughly impregnate the brush with ink from the slab or your thumbnail—whichever means you prefer for grinding your ink. When taking up the ink, twirl the brush so as to shape it to as small a point as possible.

In spotting a print, work always from the darkest to the lightest areas. So look first for dust spots and hair lines in the *darkest parts* of the picture. Also take care of any small "traps" in these areas. Cover the *whole print* in this manner, working only in the blacks and darkest tones.

When you have finished with these extreme darks, the moisture

in your brush will have become somewhat depleted. Now, at this point, *don't* go back and load up with more ink. Instead, just carry the brush to your mouth and replenish the moisture. In this manner, you will somewhat dilute the ink remaining in your brush so that you can go on to the next lighter series of tones. Spot now, all over the print, all the dark gray tones. When these areas are spotted, once more replenish the moisture in your brush and go on to the *next* lighter series of tones. So, by successive dilutions of the ink in your brush, go on to progressively lighter tones, finishing with the very palest half-tones. When this method is followed, a single inking of the brush should suffice to spot an entire eleven-by-fourteen print.

When you are taking care of a small dust spot, be sure that your brush is shaped to a sharp point, and place your dot of ink with a single deft motion precisely in the middle of the spot. If you try to *paint* your ink on instead of *placing* it, you will probably put a dark rim around the spot, leaving the spot itself looking whiter than ever.

Even with the best of intentions, it will occasionally happen that you will spot too black. When this happens, there are two ways of dealing with it. If you catch it in time, you may blot it with your finger. For this purpose hit the wet spot a sharp rap with your finger tip. This will lighten the tone by blotting or slightly spreading the ink. It is essential that you definitely *hit* the paper: never merely press or smear the spot with your finger.

However, if the ink has already partly dried before you notice that it is too black, different measures are called for. Under no circumstances, when this happens, try to remedy matters by going over the spot with a wet brush: this will result in smearing the powder-tone, and will make a mess of your print quite impossible to salvage. So, if the ink has dried too black in a few spots, let them go until the final clean-up stage. At this time the excessive blackness may be reduced by careful use of the razor blade.

Remember also that the spotting ink, in common with tempera and water color, dries somewhat lighter in tone than it looks when wet. So, when spotting, make your tone just a shade darker than the area that you want to match.

Figure 32. With spotting brush, fill in traps in hair, remove multiple highlights in eye, eradicate dust spots. Work from darker to lighter areas.

Figure 33. Final clean-up is made with blade.

Application of Spotting Brush

Let us now see how we use the spotting brush in connection with the present portrait problem (Figure 8).

First, take care of the darkest areas. Fill in the smaller "traps" in the hair (Figure 32). Also fill in the corners where the hair recedes too conspicuously at the temples. Repair the eyebrows where the blade has removed the corner, rebuilding it in a more symmetrical arch. Darken the shadow of the lid on the cornea of the eye. Spot out the extraneous highlights in the eyes, leaving only the ones that have been intensified by the blade.

Moving now into the lighter areas, spot out the dust spots and scratches in the face. Finally take care of any white spots in the background or any other extremely light part of the picture.

The Spotting Brush: Summary

This completes the use of ink and the spotting brush, which constitutes the fourth stage of the Abrasion-Tone Process. Let us

briefly summarize the usual and probable applications of the brush to a portrait:

1. Spotting pinholes.
2. Darkening the corneas of the eyes under the lids.
3. Correcting multiple highlights in the eyes.
4. Darkening accents in the hair.
5. Filling in small traps in hair or drapery, gaps in the eyebrows, gaps in the eyelashes.
6. Joining up rims of eye-glasses.
7. Sharpening of cheeks and recovering of contours.
8. Repairing small welts or gouges.

Pencil and Spotting Brush: A Comparison

Pencil and brush are used for a similar purpose: the local darkening of tone. It will help to better understand the application of the two if we briefly compare their uses.

1. The Carbon Pencil is best on large passages, filling in large traps, or darkening the general tone over an area.
2. Gradation is more readily secured in a penciled area; gradation is difficult to secure with a brush.
3. The brush works best in small restricted areas where precision is required. The pencil is not suitable for spotting small pinholes.
4. The brush is best where dense blacks are required.
5. The pencil and brush may be effectively combined, the pencil supplying the general dark tone and the brush furnishing the accent blacks within this area.

The Final Clean-up

The final stage of the Abrasion-Tone Process consists of a general checking over and clean-up with the blade (Figure 33). Look the print over carefully, and remove any pinhole spots that you may have missed.

Preservation of Prints

A print which has been subjected to Abrasion-Tone has, of course, a more delicate surface than a straight print. Nevertheless, when completed, it should be able to stand a reasonable amount of handling

without damage. If the completed print smudges with ordinary treatment, the process has not been properly carried out. When the Powder-Tone is used with *economy* and is impregnated into the surface of the paper according to instructions, a hand brushed lightly over the print should show no trace of powder. The Carbon-Tone, likewise, should be so rubbed in with pumice that it does not smear at a touch.

A more resistant surface may be secured on Abrasion-Tone prints by spraying them with "Fixatif" solution (used for fixing charcoal drawings). I do not particularly recommend this procedure, however, since the Fixatif must be applied with great skill and care and any slip-up results in a spotted and irretrievably spoiled print.

Of course, any print that you especially value should be properly preserved under glass, where it is safe from damage through careless handling.

Spotting the Glossy Print

The earlier procedures of Abrasion-Tone—the powder tone, the carbon tone, the blade—should not be attempted with glossy papers. They cannot be satisfactorily applied to such surfaces. Nor are they generally compatible with the direct dealing that is implied in a glossy print.

However, the procedure of spotting can and should be used with glossy papers. Dust spots and unduly insistent white areas will require such treatment. The general working method of proceeding from the darker to the lighter areas in the picture is, of course, observed with glossy papers just as with matt papers.

Glossy surfaces do not always accept the spotting ink as readily as do matt surfaces. A certain amount of patience and persuasion may be required. If the surface persists in spurning the ink, rub the area with a moistened finger tip. This procedure reduces the gloss slightly and permits the surface to accept the ink.

A glossy print should not be ferrotyped until *after* spotting. By the operation of ferrotyping, the ink is impregnated within the surface and may not be detected, even upon close inspection.

Chapter Six

Limitations on Use of Abrasion-Tone

The preceding chapters have given you all the mechanical basis for using Abrasion-Tone in a portrait job. We will shortly consider some applications of the process to some other pictorial problems.

But, before we go on with the more advanced phases of the process, let me remind you again of the intent of the process and of its limitations. Correct use of the process will enable you to do things that are impossible by any other photographic means, and failure to respect its limitations will surely land you in trouble.

Purposes of the Process

Let us, then, review the basic purposes of the Abrasion-Tone process. The process seeks, fundamentally, to do three things:

1. To obtain pure white in the extreme highlights of the print (and nowhere else). This is something practically impossible to obtain by purely photographic methods.
2. To secure an additional range of half-tones in the light-area. This enables you to give increased pictorial value to that part of the picture which is of most interest psychologically. You look first, and with most pleasure, at the lighter areas of the picture; hence there should be the fullest possible rendering of half-tones within these areas.

3. To eliminate or modify undesirable pictorial elements. The process makes possible certain eliminations that cannot be accomplished by any other method.

Elimination and Modification by Abrasion-Tone

In the course of preceding chapters I have indicated, in connection with a specific portrait problem, some typical eliminations and modifications. Let us summarize these, particularly as they apply to portraiture:

Flaws that may be eliminated by Abrasion-Tone:

1. Freckles and skin abrasions.
2. Stray hairs. (This is a fault impossible to correct by ordinary retouching methods.)
3. Extra highlights in the eyes, the result of a multiple light source.
4. Crows-feet and other faint lines on face.
5. Small spots, caused by pinholes in the negative or flaws in the emulsion of the printing paper.
6. Marks resulting from scratches in the negative.
7. Overlapping lines of texture. (When a texture screen is used.)

Pictorial *modifications* possible by use of Abrasion-Tone:

1. Lightening of shadows.
2. Intensification of highlights.
3. Improving of gradation in light-area.
4. Darkening of orbits of eyes.
5. Darkening of ears.
6. Darkening or lightening of lips.
7. Lightening of eyeballs.
8. Narrowing the width of nose.
11. Reduction of too light elements in dress or background.
9. Softening of wrinkles and facial depressions.
10. Filling in of "traps."

Limitations of Process

We have just outlined the probable applications of Abrasion-Tone to portraiture. The process, however, has very definite limitations.

There are certain things that you should *not* try to do with the process. If you try them, you will get into trouble. And when you do—don't blame the process.

Here are some of the things that you should never try to accomplish by the use of Abrasion-Tone:

1. Never try to eliminate *large* areas of gray or black.
2. Don't change *structure* of lips or otherwise alter *basic structure* of image.
3. Don't alter angle of eyebrows or eyes.
4. Don't use the Powder Tone as a local coloring agent.
5. Don't sharpen the contour or edges of the image all the way around.
6. Don't try to use the process to correct major errors in posing the model.
7. Don't try to use the process to correct technical errors in making the print.
8. Don't carry the process too far. If you keep on fussing and refining, you will refine all spontaniety, humanity, and photographic quality out of your picture.

Knowing When to Stop

This last point warrants further emphasis. In order to get the best results from Abrasion-Tone, you must *know when to stop.* Those who are just beginning to get the hang of the various procedures in the process are very apt to let their enthusiasm carry them on beyond the moment when the picture is properly finished.

Figure 34 is an example of what happens when you let your enthusiasm run away with you and neglect to stop when you are already finished. Compare this with Figure 8 (the original state of the picture) and with Figure 9 (in which the process is sensibly handled).

Note what has been done in Figure 34. The hair, instead of being slightly refined in its contours, is converted into the semblance of a wig. The emphasis on the "widow's peak" gives the face a very improbable heartshaped contour. The eyes have been deprived of their upper lids and have no more reality than the eyes of a waxen

Figure 34
This is what happens when Abrasion-Tone is carried too far.

image. The mouth is pure paint, with no flesh and blood beneath it. There is no remaining suggestion of skin texture: the face has been worked over so much that it has taken on a sheen like that of porcelain. All hint of accident or spontaniety has been laboriously removed from the contour, so that it is rigid, tight and smug.

Even though the craftsmanship may be so good that no sign of it appears on the surface of the print, the utterly improbable slickness of Figure 34 makes it obvious to any beholder that the print has been "doped up." This, in its way, is just as bad use of Abrasion-Tone as that which betrays itself by clumsy hacking and smearing of the print. Neither by skill run wild nor by the lack of it should the use of the process make itself known. Remember it is a *photograph* that you are working on; and, after you are through with it, it should appear, in all details, still a *photograph.*

Chapter Seven

Other Applications of Abrasion-Tone

In the preceding chapters I have stressed the application of Abrasion-Tone to portrait problems. In my own case, I have used it principally in such work. Furthermore, I have found that a portrait with a "Basic Light"* is the best subject on which to practice and learn the process. The strict limitations of such a subject compel careful workmanship and tend to restrain reckless experimentation.

In Landscape

However, the Abrasion-Tone Process is very applicable to landscape problems. *Mood* and *Light* are the primary issues in effective landscape, and these are things that the process is well adapted to working with. Landscape also permits of more thorough-going structural revisions than are feasible in portraiture.

Figure 35 is the picture that we have chosen to demonstrate the use of Abrasion-Tone on landscape material. Here we have interesting and amusing subject matter, but it is not, as it stands, an effective or arresting *picture.*

Let us note some of the flaws that keep Figure 35 from attaining its full effectiveness. In the first place, owing to the extremely dull

*Sec Pictorial Lighting, Chapter Four.

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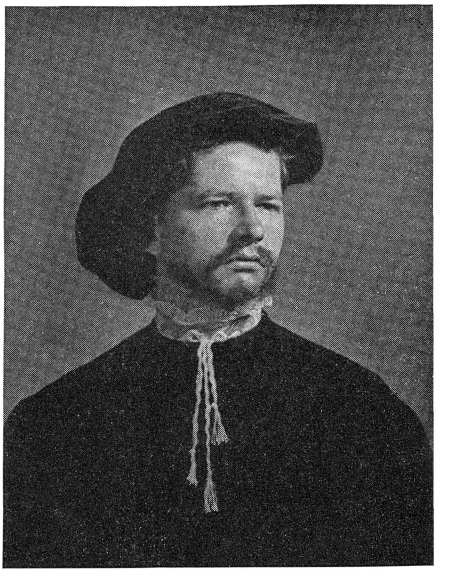


Figure 40
"Quattrocento." Original straight print. Note absence of background, defects in make-up and limited tone range.

ence and literal connotations of a *real* landscape background.

Figure 40 shows the set-up and original condition of the picture. The pictorial elements are few and simple: a model, two pieces of black velvet, a bit of lace, a tasseled cord from a bathrobe, a scrap of crepe hair (to make the beard) and a white background. The "Plastic" type of lighting* causes the background to photograph as a medium gray and supplies the face with modeling that is firm and vigorous without being harsh.

In addition to the absence of background, there are various faults here apparent that need correcting. The eyes are too much submerged in shadow. There are obvious defects in the beard—particularly on the right side. The number of tones in the face is very restricted. There is no crisp contrast near the center of interest to attract the eye and give brilliance to the whole.

With this print we follow the general order of Abrasion-Tone procedures that I have outlined above. In this case, however, the

*Pictorial Lighting, Chapter Six.

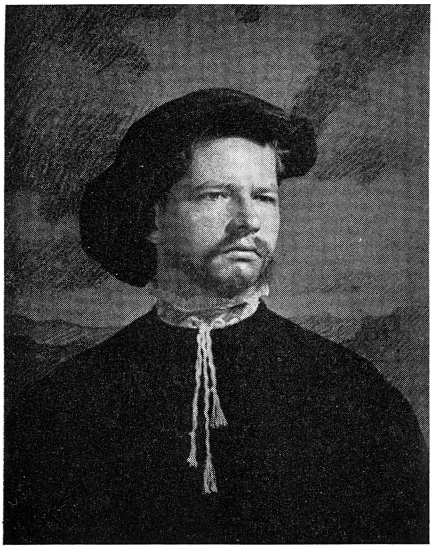


Figure 41. "Quattrocento." Background of hills and clouds roughed in with BB carbon pencil.

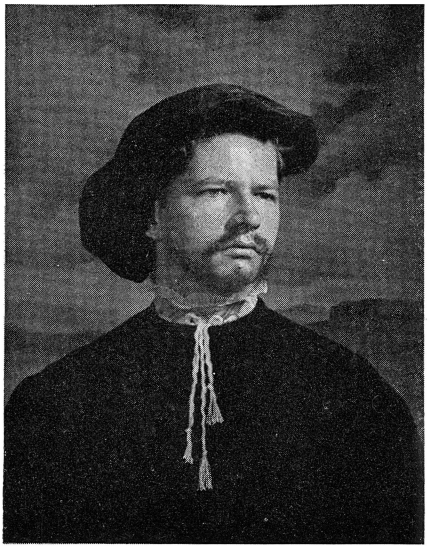


Figure 42. "Quattrocento." Background refined by use of pumice, eraser and blade.

powder-tone is omitted, so we begin with the application of the BB pencil.

The background is dealt with first. The general dark masses making up the sky and distant hills are roughed in broadly (Figure 41). Don't give any thought at this time to gradation or detail: simply put in the main masses of tone—the "abozzo," in the jargon of the art schools. Choose the position and shape of the masses so as to give increased dominance to the head. Note in this case that the head is made the center of radiating cloud shapes. Don't touch the face at this stage; leave it until the background is completed.

Next, work over the background with cotton and pumice until a smooth tone is secured in the various areas. Then, with the kneaded eraser, clear out the lighter areas. Refine again with pumice to secure gradation. Emphasize a few spots with the pencil eraser. Finally, put in a few touches with the razor blade at points where tone is desired lighter than the original medium gray of the background. The appearance of the print at this stage is shown in Figure 42. Note

"Quattrocento" *William Mortensen*

Figure 43. Finished print.

that, although the *effect* of the radiating masses in Figure 41 is retained, it is made less mathematical and obvious.

You are now ready to deal with the face. In subsequent work on the print, protect the background as much as possible, as the pencil tone is rather delicate and smudges readily.

Begin work on the face by laying a tone with the BB pencil over it all. Rub it smooth with pumice and cotton. Develop half-tones by cleaning out the light areas with kneaded eraser and pencil eraser and by blending and gradating with pumice. With the blade, the structure of the face is emphasized and a few character lines are suggested. The imperfections in the beard are repaired. The whites of the eyes are made more brilliant and crisp "catch lights" are added. Final highlight accents are placed on the lace of the collar, on the lips and on the edge of the hat.

The finished print, *Quattrocento,* appears in Figure 43.

Figure 55, *Pistachio Girl,* shows another type of added conventionalized background. This picture was originally shot against a plain white wall.

Clouds by Abrasion-Tone

In both landscape and pictorial subjects, clouds are apt to play a very important part. As we have just seen, they lend themselves readily to modification or elaboration by Abrasion-Tone.

While no specialized knowledge of cloud anatomy or meteorology is required to construct an effective cloud background, a certain amount of careful observation is needed. Most people will discover, when they try to make a background, they really don't know what a cloud looks like. So it is an excellent idea to spend several days in closely observing and memorizing typical cloud forms and shapes. Study them so carefully and intimately that when you close your eyes an hour, a day, or a week later, you can actually *see* them again, complete and fully formed. A few such detailed observations will supply you with a world of cloud material for pictorial purposes.

Much more important than strict scientific accuracy in shaping the clouds is a sense of the pictorial fitness of things. Cloud back-

grounds must emphasize the essential form and emotional quality of the principal image. A subject of generous and swelling curves would naturally call for large clouds of the cumulus type. More delicate subject matter would demand soft and fleecy cloud shapes, while the tragic note would be emphasized by dark and lowering rain clouds.

So, before you add any background, carefully analyze the connotations of your subject matter. What sort of an image do you have to deal with? Is it angular, rounded, linear—or what? Is it active or passive in its suggestion? Is it horizontal or vertical in its conformation?

With these points in mind, you may plan your background of clouds to conform—both in physical shape and in emotional value. First, with the BB carbon pencil, lay in the general pattern of dark masses. Its tone should be as dark as you intend to have the darkest patches in your sky area. With the kneaded eraser, rough in the lighter areas. This gives you your "abozzo"—the rough plan of light and dark spots. Be sure that this pattern conforms to and enhances the impression of the principal image. When the "abozzo" is established to your satisfaction, then—and not until then—you may proceed with the refinement of your background, working the larger masses with the kneaded eraser, and blending and gradating the tones with cotton and pumice. Any effort to reverse this procedure—fussing with detail at first and building up masses by accretion of detail—is certain to produce a wooden and uncomfortable result.

Many useful suggestions concerning the use of clouds in connection with pictorial material may be garnered by a study of the works of such painters as Kuyp, Jordaens and Constable. Among photographers, Leonard Misonne is particularly skillful in his handling of cloud masses. His best cloud effects are mostly obtained by means of direct control on the print in the oil process which he employs so extensively.

Rules for Added Backgrounds

The adding of a background is a tricky matter at best. Good taste and good workmanship are absolute requirements. Good taste and

artistic perception are not to be gotten by mere instruction, of course; but the more obvious pitfalls may be avoided by observing a few rules.

In the first place, in combining an added background with a principal image, remember always that, pictorially speaking, the background is the *secondary and subsidiary interest.* The background is added simply to display the principal image more effectively. So anything that tends to make the background more interesting to the eye than the image must be avoided.

From this general rule we may evolve several specific laws:

1. Never put any detail in the background. For example, to have put a house on the hill in Figure 43, with a road leading up to it, would have provided too much interest aside from the principal image.
2. Plan your background in terms of broad masses and gradations, not in terms of line and drawing.
3. Never have anything in the background that is as dark as the darkest portion of the principal image.
4. Never have anything in the background that is as light as the lightest portion of the image.
5. In other words, the background should always have a lower range of contrast than the principal image.
6. Keep your background in key with both the thought and the physical contour of the image.

Chapter Eight

Last Words

This is the Abrasion-Tone Process. Guided by skillful hands and good taste, it can accomplish things and secure print quality impossible with any retouching method or other photographic procedure. But, when ineptly handled, there is no more certain method for making bad prints worse.

I have done the best I could to describe the process clearly: the rest is up to you. Before I leave Abrasion-Tone to your tender mercies, there are three points that I wish to emphasize.

1. Remember that you are working on a *photograph.* In all alterations, modifications, and additions you must bear this in mind. Your final result must still be completely photographic in appearance. At a foot's distance, the print should show no sign of work on its surface.

2. Skill, good workmanship and cleanliness are essential to success with this process. So, withhold your verdict on the usefulness of these procedures until you have taken the proper time to acquire the skill to apply them.

3. Be *intelligent* in your use of the process. Know *why* you are using it and *how* you are using it before you start to apply it to a particular problem. Don't work at random, but know always where you are going before you start.

Part Three

Presentation

Chapter One

A Note on Showmanship

Your print is now completed. But it is not yet ready to meet the public. There are still many details of *presentation* that must be taken care of. Anything worth showing at all—whether you show it to your friends or send it to the London Salon—is worth showing to the best possible advantage.

In the following chapter we will discuss the various phases involved in presenting a picture to the public.

Good presentation is, in the broad sense of the word, nothing but good showmanship. For the sale of prints, or for their exhibition in salons, at least fifty per cent of one's chances for success depend on matters relating to showmanship. No matter how good the print, its chances for success are cut in half if it is inadequately presented.

There is nothing insincere or merely theatrical implied in the use of the word "showmanship" in this connection. Among good showmen of the theater there is a horror of blatantly noisy and aggressive presentation, unbalanced, tactless and tasteless—mere

empty ballyhoo. This is the kind of presentation that is appropriate for a fire sale, but for nothing of higher caliber.

A part of good showmanship is a sense of the appropriate—presentation that fits the subject- matter. The presentation appropriate to a Whistler nocturne would hardly be fitting for a sideshow. Nor would JoJo the Dog-Faced Boy thrive on the same ballyhoo that does for Katherine Cornell. The good showman knows how to adapt his showmanship to the thing that he is showing.

Good showmanship is the very essence of the successful management of a commercial studio. The greatest of care must be exerted to make all details of presentation effective and attractive. A typical trick of showmanship is the so-called "test print." When the patron calls to get his proofs, he is shown a large print of himself from a carefully selected negative, beautifully finished, impressively mounted and framed, and reverently presented. "Just a test print," he is told; but it is really a very neat bit of showmanship. The patron, if he is half-way human, is so smitten with his own pictorial possibilities that he puts in a substantial order before he recovers from the spell.

A true flair for showmanship is a very frequent phase of the artistic temperament. Wagner and Whistler, to name two, were outstanding showmen as well as artists in their particular fields. Even those artists who are timid and retiring in their ordinary social contacts are apt to be excellent showmen when it comes to the presentation of their own works of art; for they find in such presentation a compensatory opportunity for self-glorification.

Those who lack the flair for showmanship must cultivate it, if they have any ambition to go places in portrait or pictorial photography. He whose interest does not go beyond the technical aspects of making the print will never make a picture. A picture that is not given the advantage of presentation is only half a picture.

Showmanship at its best, of course, is an innate gift; but those who feel themselves deficient in it may do much to cultivate it and to improve their feeling for presentation values. Here are a few suggestions:

1. Be sure you have a reasonably good print before you trouble about details of presentation. An inferior print well presented will catch the attention, no doubt; but the excellence of the presentation will soon emphasize the badness of the print, like a platinum setting for a chunk of glass.

2. *Never* show, even to your best friend, a print which is not presented to the best of your ability. The good showman never submits his public to disillusioning glimpses behind the scenes.

3. Check and eliminate those personal habits that are apt to interfere with effective presentation. The most common faults of this sort are carelessness, slovenliness and impatience. Those who excel in the presentation of their prints have an almost *military* passion for orderliness and mopping up details.

4. Learn to appreciate and savour the reaction of the public to your pictures. Only thus can you check up on the effectiveness of your presentation methods. This public reaction, favorable or unfavorable, is one of the major rewards of picture making.

We will now proceed with making the print ready to meet the public.

Chapter Two

Trimming and Cropping

Any extended consideration of the art of cropping belongs properly in a book of composition. Knowing what to crop and how deep to cut are very important phases of picture making.

However, as trimming of the picture generally takes place at this particular point in the finishing procedure, it is necessary that we touch on it briefly.

Nowadays the major part of "framing" and cutting a picture takes place during the process of projection.* Unless drastic changes in the picture scheme are carried out, most of the trimming that is done during the finishing of a print is merely for the sake of final adjustment and refinement.

Choice of Trimmer

There is no adequate substitute for a good trimmer. Attempts to use substitutes—such as scissors, or a ruler and a razor blade—bring forth nothing but loss of time, cut fingers, ruined dispositions, and very indifferent results. A trimmer needs to be of sturdy, heavy construction and of ample size (not smaller than fifteen inches square on the base). Cheap, lightweight trimmers may be able to handle

*See Projection Control, Chapter Six, for data on "framing" during projection.

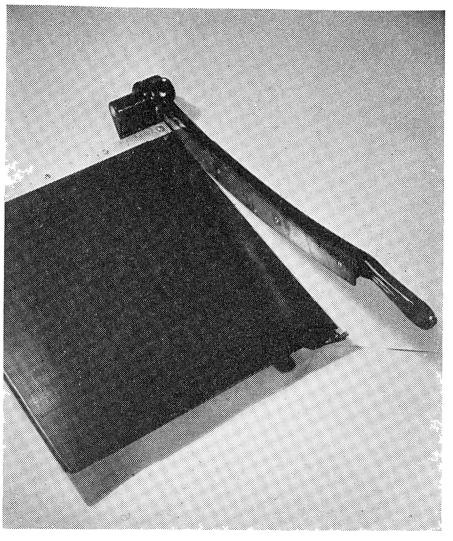


Figure 44
The recommended type of trimmer: all-steel construction, fifteen inches square on the base.

prints after a fashion, but a trimmer needs also to be able to cope with mountings and heavy chip-board.

A trimmer of the sort shown in Figure 44 is the type recommended. This is of all-steel construction, fifteen inches square on the base.

Some Suggestions

As I have said, a knowledge of, or at least a feeling for, compositional values is the basis of good cropping. However, a few suggestions may help you avoid gross errors in cutting.

Bear in mind, first of all, the obvious but neglected fact that it is always possible to trim off more, but impossible to restore anything that you have recklessly shorn away. So go about your cropping slowly and carefully. Ease your way into the print by thin slivers of an eighth or a sixteenth of an inch. Check the effect after each cut.

Generally cut the *base* of the picture first. Follow this with the *left* side, then the *top*, and finally the *right* side.

A fairly safe rule-of-thumb to observe in cropping profile and three-quarter head angles is to preserve substantially more room in front of the face than behind it. Violations of this rule are fairly

Figure 45
"Saskia." Original condition of print. The bad spacing and meaningless expanse of dress demand that the print be cropped.

frequent, but the rule is basically sound and should be followed unless there is a good reason for exception.

Just how far to proceed, and just how deep to go with your cropping, is a delicate question of taste. There is a precise point at which a balance is reached. As you begin cropping, you will note that each slice that you remove by paring away inessentials, increases the significance of that which remains. As long as this holds true, you may continue with your cropping. But finally you will reach a point at which the remnant, instead of becoming increasingly significant, becomes increasingly aggressive and melodramatic. You must learn to recognize when you reach this turning point.

Note Figures 45, 46, and 47. Figure 45 is obviously in need of cropping, being badly spaced and cluttered with inessentials. Figure 46 shows the improvement that may be effected by wise and restrained cutting. But in Figure 47 the cropping process has been

Figure 47
Aggressive melodrama caused by over-cropping.

carried too far, and the picture has become blatant and absurdly melodramatic.

Before indulging in such "choke shots," you should be very sure that your subject matter is *important* enough to deserve such a spotlight of concentrated attention. Contemporary photography is much inclined to over-use the choke shot. It is particularly out of place in photographs in which the emphasis is on literal rendering rather than on subject matter. This sort of treatment screams to the observer, "Look, look, *look*, LOOK!" To which the slightly ruffled observer replies, "Yes, I see the man has a fly on his chin. So what?"

Such concentrated and meaningless emphasis on a merely technical effect—no matter how perfect—suggests some such scene as this: Imagine a huge and magnificent opera house, filled with people to its topmost gallery. At the appointed moment, the houselights are lowered and a hush of anticipation spreads through the audience.

"Saskia" *William Mortensen*

Figure 46. "Saskia." An appropriate cropping of Figure 45.

The world's greatest soprano comes upon the stage. She stands in the center of the platform while a hundred spot lights are focused upon her. Then she sings *a single note*—a full, ringing, golden high C. She bows deeply to the applause, she walks off the stage, the curtain comes down, the lights are lowered and the audience goes home.

What is wrong with the scene that I have just sketched? Would any audience, no matter how famous the artist or how perfect her high C, consider this an adequate performance? The answer is obvious. Yet this is exactly the sort of a performance that many excellent photographers are putting on these days—spectacular presentation of trivialities. Choke shots and excessive cropping may startle the public for a moment, but they can't fool them into permanently accepting this idiom. In the long run, there is no substitute for sound subject matter, soundly presented.

Chapter Three

Mounting

The most important single procedure in the presentation of a print is that of mounting. It appears remarkably simple—this act of pasting the print to a piece of cardboard. But if it is badly done, even the best of prints loses its effectiveness. Clever mounting, on the other hand, will much enhance the print, and will make the most of its good points.

In the last analysis, of course, the mounting of a print is a matter of good taste and personal feeling. So my comments in this chapter are not to be regarded as any effort to set up any absolute, hard-and-fast standard of procedure. I will, rather, simply point out certain general, common-sense principles of proportion and tone relationship —and certain regrettably prevalent errors resulting from the failure to observe these principles.

The Function of Mounting

There are two general purposes involved in mounting a print. The first and obvious purpose is the utilitarian one of protecting the print and holding it flat. The second and more important one is that of *isolating* the print. By means of the mount the print is separated from the surrounding distractions and is permitted to exist in a space of its own.

For carrying out the first purpose of mounting a print, one needs only a certain deftness of hand and an instinct for neatness. But the

fulfilling of the second purpose—that of isolation—is more difficult. It requires study, artistry, and a feeling for spacing and tone values.

Methods of Mounting

There are three types of mounting in common use:

1. Dry mounting
2. The sunken mount
3. Surface mounting

Dry mounting involves the use of a tissue impregnated with a shellac base adhesive. When pressed with a warm flat-iron (about 175° F.), or placed in a special type of heated press, the adhesive softens, and the print adheres flat to the mount.

In sunken mounting a specially made type of mount is used, in which the picture is framed within a "window" cut in the top part of the mount. This sort of mounting is favored by many commercial portraitists.

Surface mounting is the simplest of the three. The picture is placed directly on the cardboard mount and adhesive is applied only along the top edge of the print. This is the type of mounting that I generally use and recommend for most purposes.

Dry mounting is open to many practical objections. In the first place, it is an expensive method—if done right. Though many amateurs try to do dry mounting with a flat-iron, it is a very poor expedient, and the results are usually bad, what with prints coming unstuck, showing the marks of the iron, etc. If you are determined to do dry mounting, do it right with a dry mounting press—which will cost you in the neighborhood of sixty dollars. When the procedure is done correctly, the print is permanently and indissolubly united with the mount. This means virtually that the print is lost when the mount is soiled or damaged. A further objection to dry mounting is that it is practically impossible to use it with a "step-off" type of mount. Finally, it should be noted that a dry mounting job will not keep flat permanently. Eventually—usually within a few weeks—the print develops welts and bubbles, owing to the unequal expansion and contraction of the mounting tissue and the backing.

The sunken type of mounting is tricky. Considerable manual skill is required to use it correctly. It is, however, a very effective and pleasing method for displaying a small bromoil. Like dry mounting, it does not adapt itself to the use of any sort of "step-off"—which is demanded by certain types of prints.

These various difficulties are obviated in the surface method of mounting. No special type of mount, no tissues, no expensive apparatus, are required. There is never any buckling or bulging. Step-off mounts may be used whenever desired. If the mount becomes damaged, the print may always be salvaged and placed on a fresh mount. It is true that, if left exposed, prints so mounted show a tendency to curl away from the mount; but any print worthy of mounting should also be worthy of being glassed or kept in a portfolio.

Rubber cement is satisfactory as an adhesive for surface mounting. Personally, however, I prefer Higgins Vegetable Glue for this purpose.

Size of Mount

In all the comments that follow about the size of mounts, their spacing and proportion, I shall assume that you have to deal with a print not smaller than eight-by-ten. This is generally the very smallest size that is acceptable at salons: most of them, indeed, prefer that nothing be smaller than eleven-by-fourteen. Also, eight-by-ten is the smallest size of print to which it is feasible to apply the control methods that have been outlined in Part Two.

What size of mount is preferable for an eleven-by-fourteen print —the standard salon size? Sixteen-by-twenty are the conventionally accepted dimensions. However, I regard this size as much too large. It is ungainly and awkwardly big, and it invariably gets dog-eared and bent in transportation or handling. And a still more serious fault—it is so big that it dwarfs and weakens many high-key eleven-by-fourteen prints that cannot stand so much surrounding area.

Fourteen-by-eighteen is the best size to take as a standard for eleven-by-fourteen prints. For choke shots and low-key material which—as we shall see—demand more space around them, the size

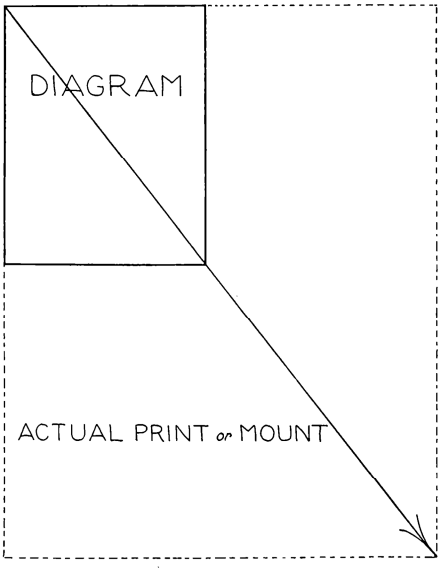
of the print should be slightly reduced. *Never* be tempted to the vulgar practice of making the head of a choke-shot as large or larger than life.

In order to avoid introducing too many complicating factors in this chapter, fourteen-by-eighteen is assumed as the standard and constant proportion of the mount for the (approximately) eleven-by-fourteen print.* Necessary adjustments in proportion are to be made by trimming the print and "framing" it during projection—not by changing the shape or size of the mount.**

We may note in passing that fourteen-by-eighteen is a standard size for glass. A sixteen-by-twenty glass will cost you nearly fifty percent more.

Some salons, however, insist on the sixteen-by-twenty standard. They remount all prints accepted by pasting them, mount and all, on their standard-sized mount. This procedure, however, does not wholly lose the effect of the smaller mount, and also gives you the advantage of additional backing for your print.

There is a definite and important connection between the *key****



*For the eight-by-ten print, the corresponding proportion of mount is eleven inches by fourteen.

**The best method of checking your own prints and mounts for conformity to the proportions indicated in the diagrams in this chapter is the old familiar art-school procedure of the extended diagonal. It is based on the principle that rectangles with parallel sides and a common diagonal are similiar—i.e., are identically proportioned. The accompanying sketch shows how it is used. If the diagonal of your print or mount coincides with the extended diagonal of a diagram, the proportions are identical.

***For fuller explanation of the meaning of "key," see Pictorial Lighting, Chapter Nine.

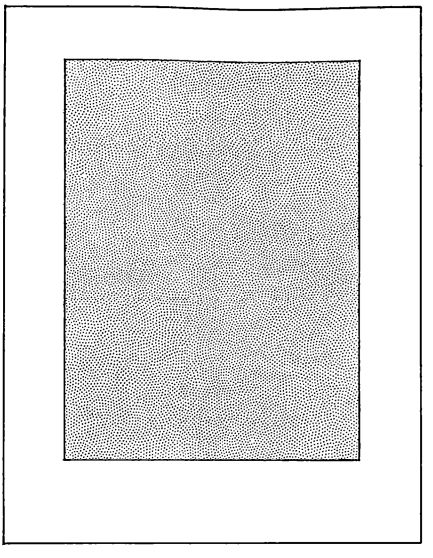


Figure 48. A high-key print requires a rather narrow mount. The correct proportion is here indicated.

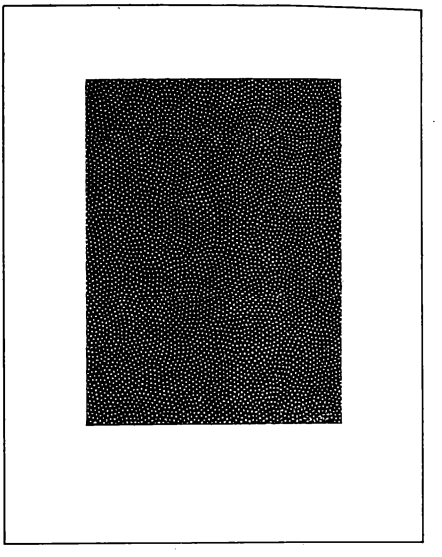


Figure 49. A low-key print requires a wider mount.

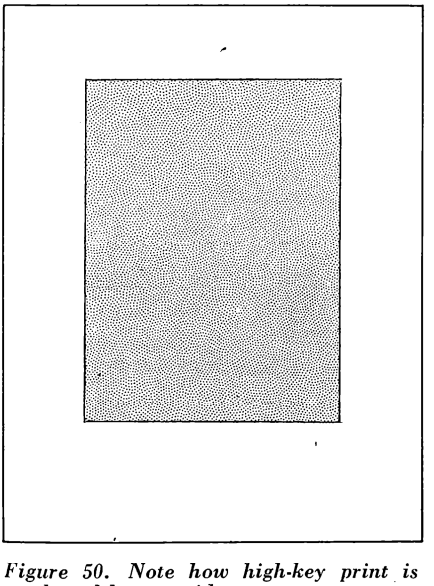


Figure 50. Note how high-key print is weakened by too wide a mount.

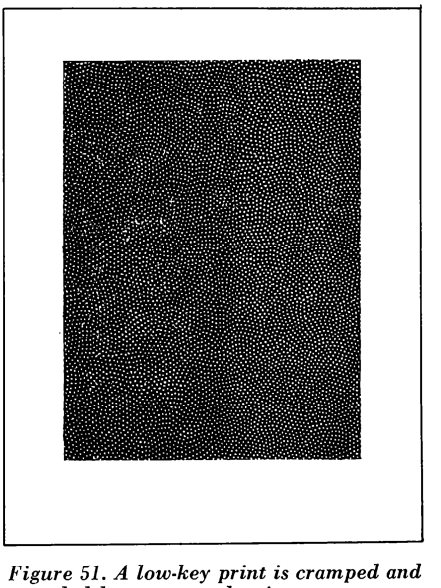


Figure 51. A low-key print is cramped and crowded by a mount that is too narrow.

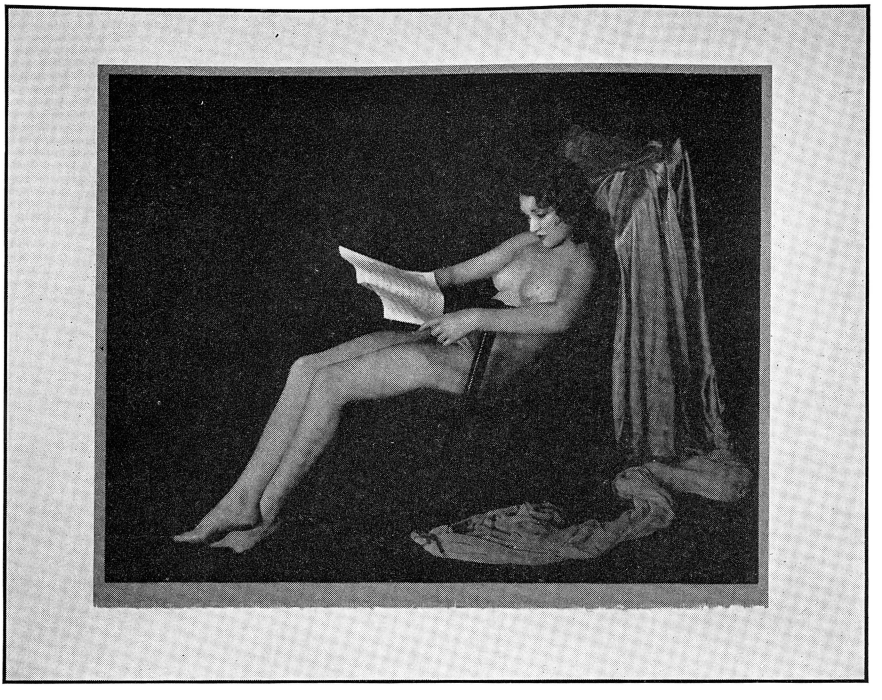


Figure 52. "Figure Study." Note width of mount on this low-key print.

of the print and the relative size of the mount. A low-key print requires more surrounding area in the mount than does a high-key print. (See Figures 48 and 49, which indicate approximate proportions of the mount for high- and low-key subjects.) A high-key print is weakened and diluted if the surrounding area of mount is too large. A low-key print, on the other hand, is cramped and crowded by too narrow an area of mount. (Note in Figures 50 and 51 the bad effects of failing to consider the relationship of key to mount area.)

Like low-key prints, "choke shots" and large dominant heads require considerable area and isolation. (Note the mounting of Figure 53.) On the other hand, a print which features small detail or texture requires much less area in the mount. (Note Figure 54.)

Portraits of the classic type, or full length figures, in which the

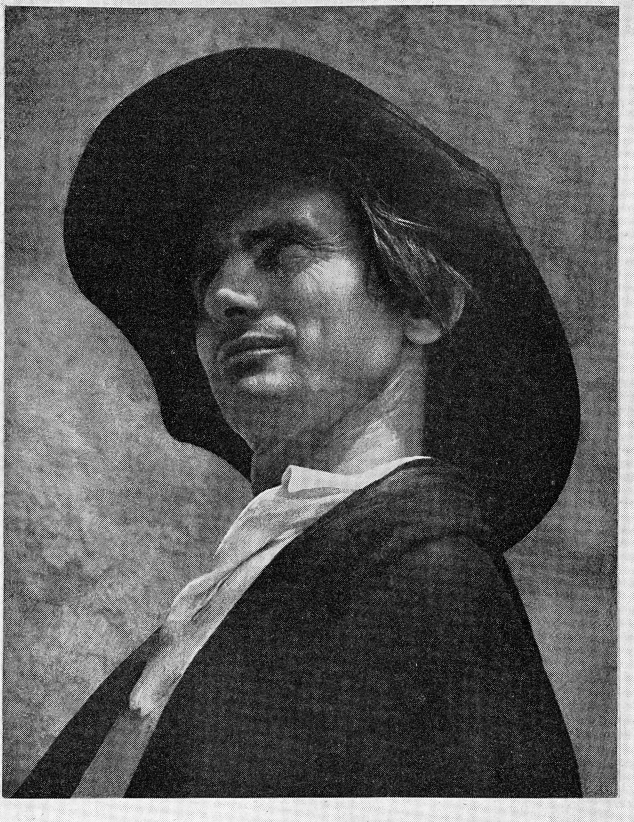


Figure 53. "Pierre." Large mount required by "choke shot."

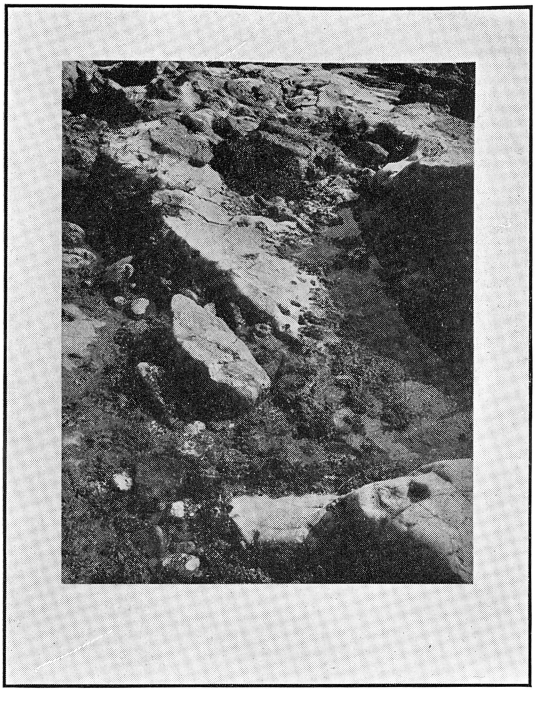


Figure 54
"Low Tide." Texture detail requires narrow mount.

head occupies relatively small area in the picture space, require but little area in the mount. This is because isolation is already furnished by the background of the picture itself (see Figure 55).

Color and Texture of Mounts

Some photographers go in for cream, tan, gray or even more emphatically colored mounts. They also employ, on occasion, mounts that are variously textured, grained and pebbled.

Now, many of these mounting materials may be very attractive—in themselves. But the business of a mount is not to be attractive: its business is to show off the *print* to the best possible advantage. And these conspicuously colored and textured mounts defeat their own purpose by calling attention to themselves.

Therefore, avoid at all times any extremes at all of color or texture. As far as black and white prints are concerned, it is best to stick to a plain white mount. However, a warm-toned or sulphide print

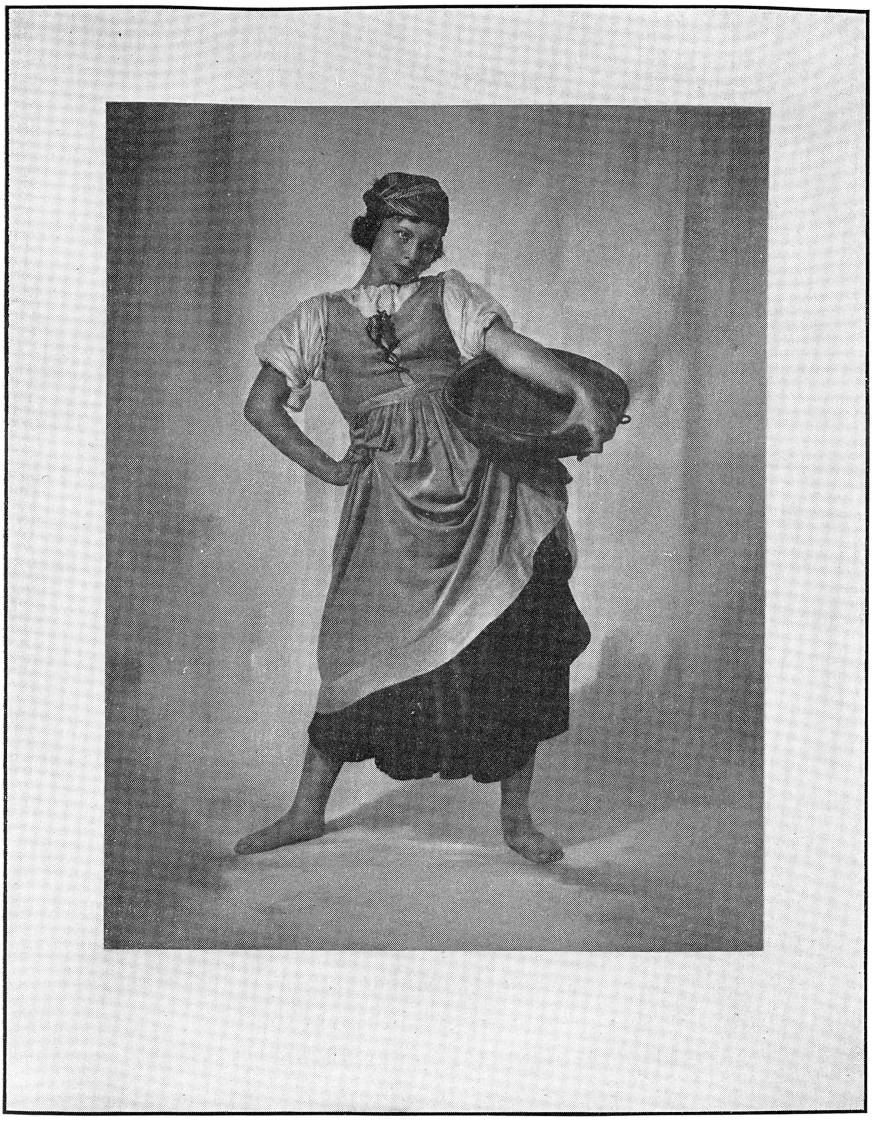


Figure 55. "Pistachio Girl." Full length figure with large surrounding area of background needs little area in the mount.

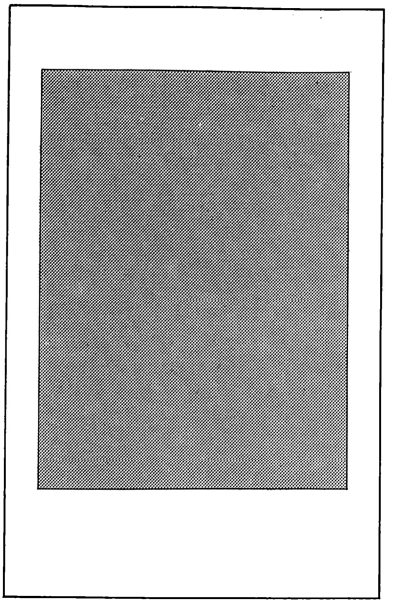


Figure 56. Side space is essential to "isolation." Note, in this example, that the eye slips too readily from edge of print to edge of mount.

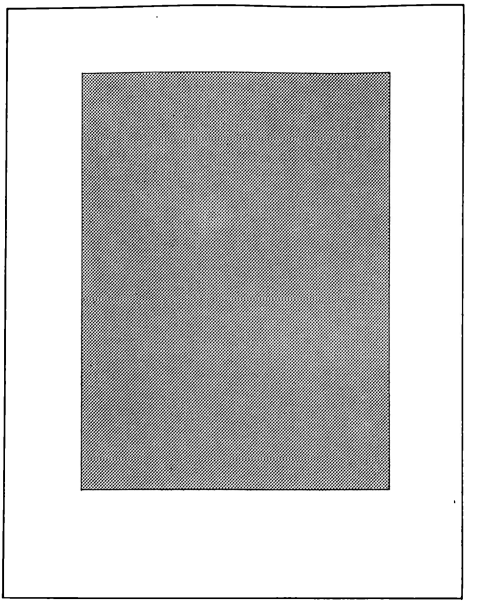


Figure 57. The ample side space here gives a proper impression of isolation.

looks best on a faintly warm mount. The tone of the mount should not be noticeable, but just barely off white.

Spacing of Print on Mount

The most delicate problem involved in mounting a print is that of *spacing*—the exact place to put the print on the mount and the relationship of the areas at top, sides and bottom. Owing to the delicacy of the problem, personal taste and judgment must play an important part in spacing. There is no substitute for good taste in such matters, but a few general rules will help the beginner and the uncertain worker from falling into gross errors.

In considering the matter of spacing, it is important that we bear in mind that function of the mount which we have called *isolation.* The mount, we have seen, gives the print a free space of its own which separates it from distractions and irrelevancies of its surround-

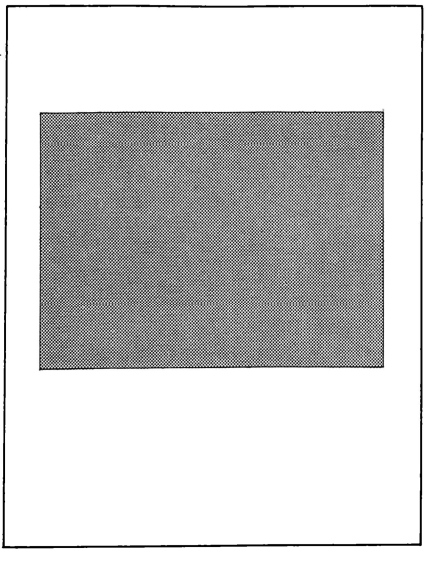


Figure 58. This is the best spacing of a horizontal print on a vertical mount.

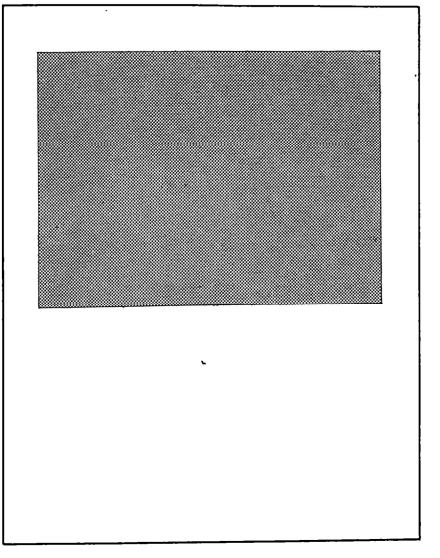


Figure 59. Raising horizontal print to secure equal spacing at top and sides gives excessive space at bottom.

ings. The art of spacing consists in properly apportioning this space at top, sides and bottom of the print.

In securing isolation for the print, the areas on the sides are much more important than those at top or bottom. This is because in looking at a print or a series of prints, the eye travels more in a horizontal direction than it does up and down. Compare Figures 56 and 57 for an illustration of this fact. The space at the top is the same in both cases. Notice how little sense of isolation there is in Figure 56: the eye slips too readily from the edge of the picture to the edge of the mount.

On the basis of this fact, we make our first general rule for spacing: *With normally shaped vertical prints, never have a wider space at the top of the picture than there is on the sides.* Thus we retain isolating areas on the sides, where they are most needed.

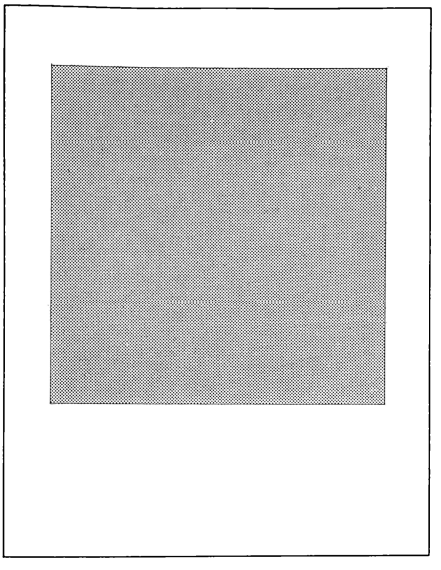


Figure 60
This is the proper spacing of a square print on a standard mount.

This procedure must be modified when either a horizontal or a square print is placed on a vertical mount. The average photographer, unless he specializes in landscapes, will produce a horizontal composition about once in ten pictures. In order to preserve a certain amount of uniformity in the presentation of prints, I generally favor placing the occasional horizontal pictures on vertical mounts, uniform in size and shape to those used for the vertical prints. The most satisfactory spacing under these conditions is that shown in Figure 58. Notice that the space (contrary to the rule) is here narrower on the sides than at the top. Raising the picture so as to secure equal spacing at top and sides (Figure 59) causes too much discrepancy between the top and bottom.

A square print is possibly of even rarer occurrence than a horizontal one. It is mounted similarly to a horizontal print on a vertical mount (Figure 60), with somewhat wider space at the top than on the sides.

The general rule holds, however, when a horizontal print is

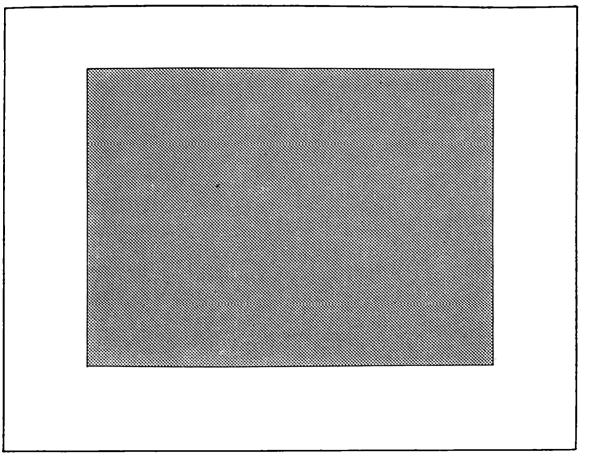


Figure 61.
A horizontal print on a horizontal mount requires this spacing, wider on the sides than on the top.

placed on a horizontal mount (Figure 61). Notice that the space here is wider on the sides than on the top.

The relationship of the spaces at top and bottom is the next problem. Even the most untrained observer feels the need of more space on the bottom than on the top. Note Figure 62, in which the print is equally spaced at top and bottom. To the eye, the print seems to sag below the center and to be inadequately supported. Think of the print as having *weight* which must be buoyed up by ample space below it.

Here, then, is the second rule for spacing: *Have at least half again as much space at the bottom of the print as there is at the top* (Figure 63). E.g., if there is a two-inch space above the print, the space below it must be three inches or more.

Of course, the print must not be shoved *too* high on the mount. In Figure 64 there is an oppressive suggestion of "low ceiling," and the print seems to be squeezed at the top.

It is occasionally a useful trick of presentation to use an extra large mount for a bromoil or similar choice item. The increased isolation given by the larger surrounding area serves also to increase

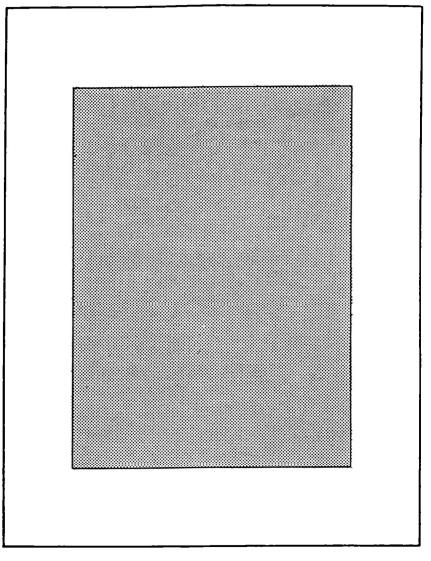


Figure 62. Print equally spaced at top and bottom seems to sag below center.

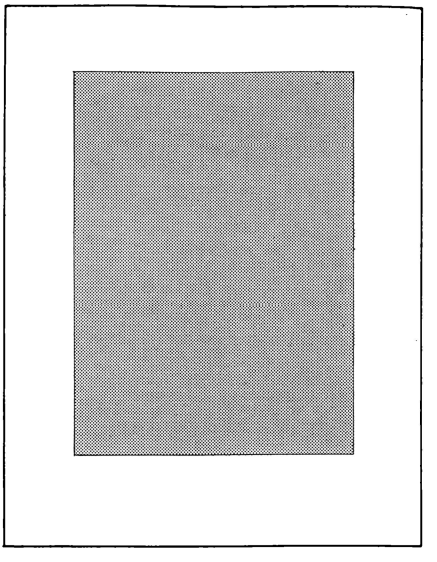


Figure 63. Print requires at least fifty per cent more space at bottom than at top.

the impression of preciousness. It is tantamount to putting a rope around it with "Don't Touch" signs. But this device should be used only with material that warrants such presentation. And it should not be done too frequently: the trick loses its effect by repetition. Warning should also be given not to make the mount *too* huge. Too vast a surrounding space dwarfs the print, so that it becomes insignificant instead of precious.

Use of the "Step-Off"

So far we have been assuming that the print is mounted directly on the white mount. This is the proper procedure in all cases where the background of the print is in the medium range of half-tones (Figure 65). There are two cases, however, where a print should not be mounted directly on a white mount.

One of these cases is when a print has a white (or nearly white)

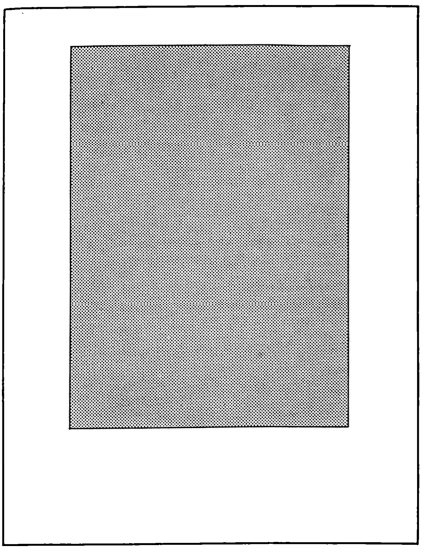


Figure 64. Print too high seems squeezed at the top.

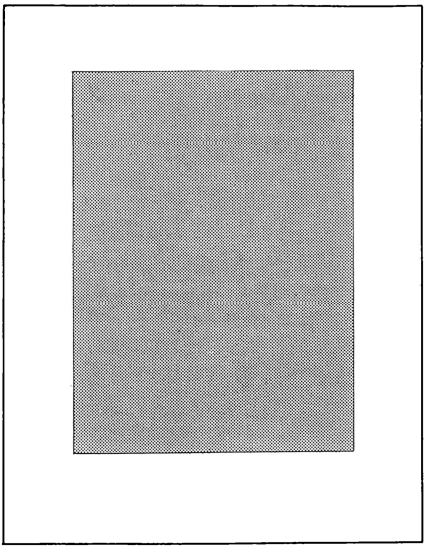


Figure 65. Print with medium gray background should be placed directly on mount.

background or a white garment coming clear to the edge on one or more sides. The effect of mounting such a print directly on the mount is obviously bad (see Figure 66). The white of the picture falls off right into the white of the mount, and there is no clear separation between the two.

It is equally bad when a print with a black background or a very dark foreground coming clear to the edge is mounted directly on a white mount (see Figure 67). The fault here is that of excessive contrast. The direct collision of black and white detracts from the picture.

Both these cases require a "step-off" mount. The "step-off" is a sheet of paper of medium gray tone, cut somewhat larger than the print, and mounted along with it on the white backing. The rim or border of tone serves, in the first case, to separate the whites (Figure

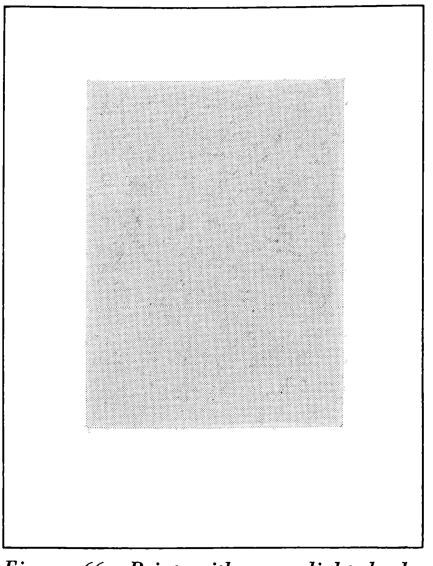


Figure 66. Print with very light background lacks separation from mount.

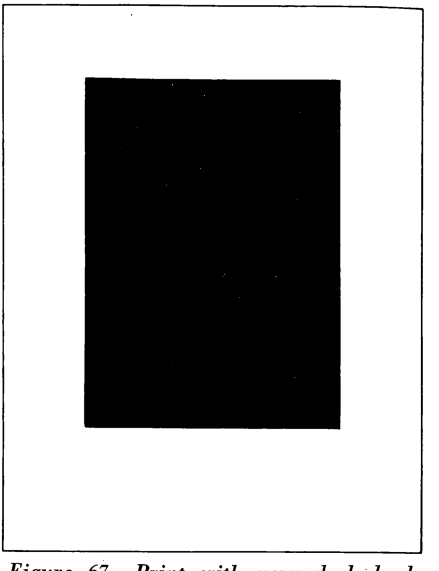


Figure 67. Print with very dark background contrasts harshly with mount.

68), and, in the second case, to mitigate the crass contrast by the use of an intermediate half-tone (Figure 69).

Do *not* use a step-off unless the tone of the background *requires* it. When a step-off is used with a medium-toned background, the step-off merges with the background, and the proportion and placement of the print may be seriously upset. Bear in mind that, generally, the step-off is functionally a part of the mount—not of the print—and the use of the step-off should in no way affect the placing or proportions of the print.

In choosing a paper to use as a step-off, one should remember that the function of a step-off is primarily utilitarian and not decorative. Therefore, avoid anything that is "flossy" or obvious in color or texture. (The fancy multiple step-offs that one sometimes sees are very handsome, and marvels of workmanship, but they are always more effective than the pictures that they are used on.) However, a certain fragility in color and material is permissible with a step-off.

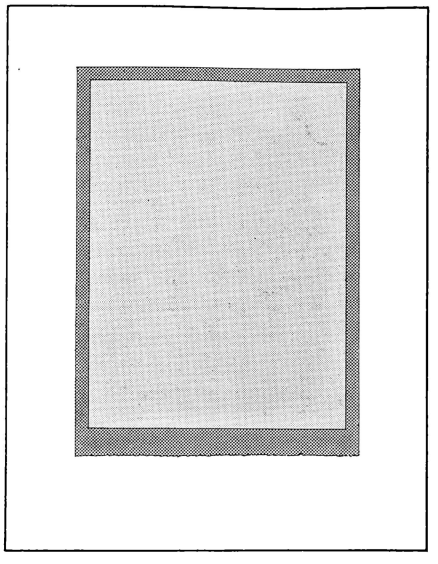


Figure 68. Medium gray step-off serves to separate light background from mount.

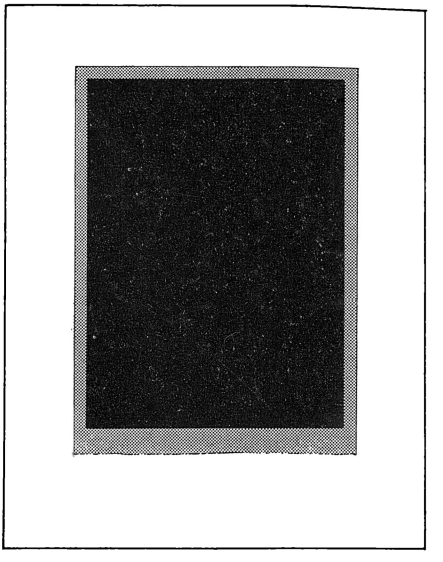


Figure 69. Medium gray step-off moderates the harsh contrast of the dark background.

For general purposes I prefer charcoal paper for step-offs. This is a machine laid paper, neutral but pleasing in texture, and with a delicate natural deckle along one edge. For an extremely delicate and high-keyed print, I have occasionally used Japanese rice paper. For most purposes, the step-off material should be a medium warm gray.*

In certain special cases, it is advisable to use a *black* step-off. Massive architectural subjects frequently require it. So also does some poster-like material, with dominant blacks (Figure 70), or with repeated black motives (Figure 71). In these cases, the step-off is more than a mere mounting; it becomes an actual structural element in the picture, helping to hold the blacks together. Black paper may be used thus; but a black border printed directly on the picture is better.**

*The gray at the top and bottom of the cover to The Command to LOOK is the right tone for use in step-offs.

**See Appendix.

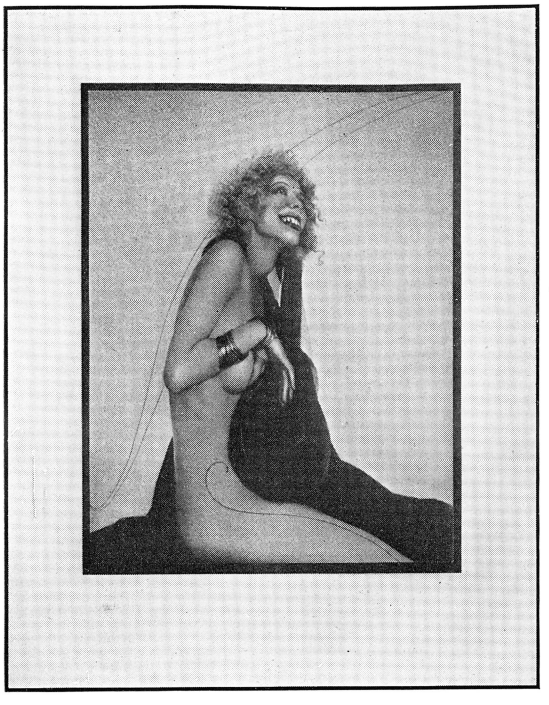


Figure 70
"The Succubus." Showing use of black step-off.

The proper *width* of the step-off is determined by the subject matter. Delicate high-key material cannot stand a step-off wider than a quarter of an inch on the top and sides. (Beware, however, of a step-off that is *excessively* narrow, as it creates a starved and pinched impression.) Only heavy low-key material with dark background can take a step-off wider than three-eighths of an inch. These dimensions, it should be understood, are given in terms of an eleven-by-fourteen print.

The step-off should be about twice as wide on the bottom as it is on the sides. E.g., a quarter-inch step-off should be about half an inch wide at the bottom. The width at the top should never be less than that on the sides (Figure 72).

In cutting the material for the step-off from the sheet of charcoal paper, you make your cut in such a way that the deckle edge is preserved along the *bottom* of the step-off. The deckle should never

Figure 71. "The Gay 90's." Repeated black motives need black step-off.

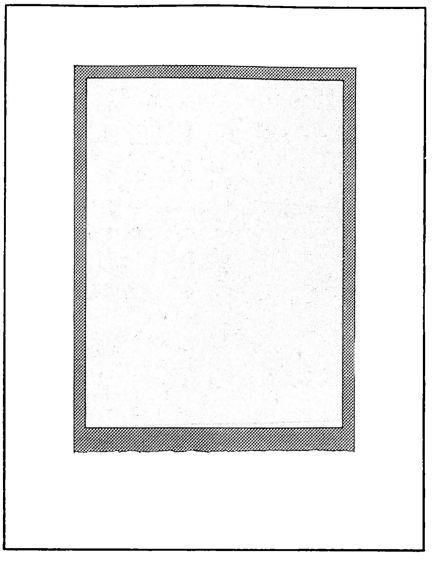


Figure 72. Step-off should be about twice as wide on bottom as on sides.

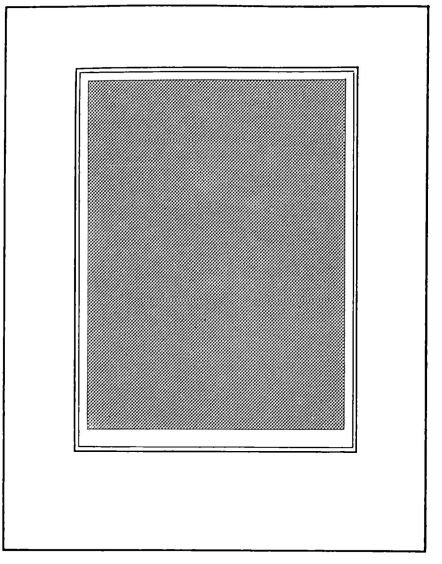


Figure 73. Ruled pencil lines may sometimes take the place of a step-off.

appear along the top or sides. If the natural deckle edge is lacking, or has already been cut away, a fairly presentable deckle can be added. There are two methods for doing this.

The first method consists merely of laying the paper so that it overhangs the edge of the table or workbench, holding it firm with the flat of one hand and tearing off the overhanging part with the other hand. Work carefully, tear only about an inch at a time; then move your hand up, take a fresh grip and tear off another inch. If you tear too much at a time, without shifting your grip, you will not produce an even deckle.

The second method is rather more complicated and takes more time. With warm water and a camel's-hair brush saturate the paper along the line on which it is to be torn. It will take five or six applications over a period of half an hour to obtain the necessary complete saturation. Then lay a ruler along the saturated line, hold it down

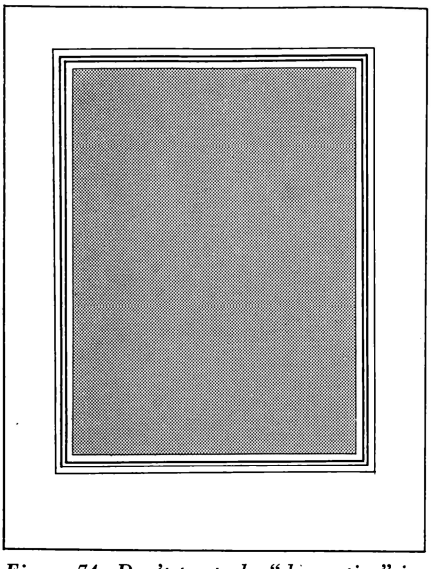


Figure 74. Don't try to be "decorative" in use of ruled lines.

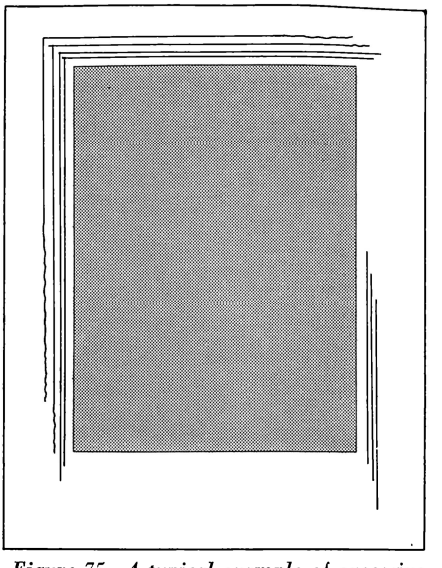


Figure 75. A typical example of excessive enthusiasm.

hard, and, with a firm, straight pull, separate the paper at the edge of the ruler. There should be no tearing action: the paper is simply pulled apart. This second method produces a very pleasant deckle, the nearest thing possible to the natural deckle of "laid" papers.

There are also available specially constructed trimmers that will cut a deckle edge. Generally speaking, the most pleasant type of deckle is the natural, untorn type which occurs along the edge of a laid paper.

Be careful lest you overdo the torn edge along the bottom of the step-off. The very shaggy edges that are sometimes seen are clumsy and affected, and are bad distracting elements.

The deckle edge is not appropriate to all types of subject matter. Generally speaking, it connotes *mood* and *fragility*, and is particularly suitable to high-key subject matter of an imaginative nature. It is not at all appropriate to the modern, the realistic, or to subject matter that emphasizes texture detail.

In lieu of a paper step-off, lightly ruled or penciled lines are sometimes used. Since they take the place of the step-off and fulfill the same function, the lines should occupy about the same area that would be filled by the step-off. Don't put the lines too close to the edge of the print, since they then become confused with the edge. Figure 73 shows an example of the correct use of ruled lines. Never try to become "decorative" in your use of ruled lines. The lines take the place of the step-off—nothing more. So avoid scrolls, swirls, and other fancy touches. Figures 74 and 75 show what *not* to do with lines.

Mechanical Details

Everyone who does a great deal of mounting will work out his own individual methods and time-saving tricks of procedure. But a few suggestions on the mechanics involved may prove helpful to the amateur, who generally finds himself a bit bewildered by the complexities that develop in this apparently simple problem of attaching three pieces of paper to one another.

In the first place, before you start gluing things together, carefully check the mount, step-off and print by laying them over one another as you wish them to appear. Make sure that mount and step-off are of right size and properly proportioned to the print. Determine definitely just how far down from the top of the mount you wish the print to be placed.

With this final check-up you are ready to bring on the glue. Place the mount in front of you, laying the print and step-off to one side. Have a clean cloth handy. Pick up the step-off and lay it upside down, with the top edge toward you. Dip your right forefinger in Higgin's Vegetable Glue and draw a thin line of glue along this edge. Use as little glue as possible; avoid lumps and smears. Spread the glue only along one edge. Pick up the step-off and lay it in its proper position on the mount, remembering that the step-off needs to be placed a little higher than the print. Now press the glued edge into place with the thumb, wiping off any excess glue with the cloth. Proceed in the same manner with the print.

A good eye is necessary to place the print accurately in the center and precisely parallel to the sides. It is desirable that you learn as quickly as possible to depend upon your eye and not resort to clumsy and time-wasting proceedings with the yardstick. However, if your eye is very untrustworthy, you may for a while assist it with a few measurements. For centering the print, you will find it helpful to make yourself a ruler that reads both ways from the middle.

As soon as the print is mounted, it should be placed in the press and kept under firm pressure for at least an hour.

Mounting the Glossy Print

In giving these details on mounting, we have assumed that the print was made on a matt surface, since it is this type of print which usually receives the fullest pictorial treatment.

Somewhat different presentation is required for a glossy print. The whole implication of the glossy print—and its justification also —is its directness and forthrightness of statement. The use of glossy paper suggests that *merely* decorative values are not involved. Consequently, the degree of "isolation" furnished by the mount need not be large. The area of the mount surrounding a glossy print needs to be only about two-thirds of that required by a matt print of the same size and key. A glossy print looks badly out of place on an over-size mount.

Also inappropriate to the glossy print are the use of such decorative and pictorial adjuncts as frame and glass. The refreshing and sparkling episodic quality of glossy prints is something that is best displayed within an album rather than on the wall.

Mounting the Commercial Portrait

Thus far we have considered the various details of mounting entirely from the viewpoint of the pictorialist. The mounting problem of the commercial portraitist is somewhat different. Theoretically, of course, the same considerations of good taste and of displaying the picture for the picture's sake should guide the commercial man as well as the pictorialist. But there are certain practical matters affecting the former which the pictorialist does not have to cope with.

The commercial man, of course, is not making pictures for his own amusement and gratification. He has to deal with the vanity and perverseness of his public. There is frequently a considerable amount of vanity and ostentation involved in the mere act of getting one's picture taken. Such vanity and social competition is not generally compatible with best pictorial presentation. Because Mrs. Jones has had her picture on a large pink mount, Mrs. Smith must have hers on a still larger and even pinker mount.

There is, no doubt, a considerable group of people who are susceptible to the blandishments and flattery of the ostentatious mount. If his trade lies among people of this sort, the photographer must of course cater to their tastes, exercising such gentle missionary influence as he can in suggesting more conservative presentation.

An occasional photographer, of very individualistic character, may be able to present his commercial portraits in the barest pictorial manner, simply pasting the prints to homemade mounts; but most of us find it necessary to make concessions to commercial methods and to use ready-made commercial mounts.

Among the successful commercial studios that do business on a basis of sound presentation, we may note two general methods.

The first method is that of the studio that caters exclusively to the expensive trade. The standard presentation of a studio of this sort consists of an 11 x 14 print on a 16 x 20 mount. The latter is usually of the sunken type, made of extremely costly and conservative materials. Quiet good taste is manifested throughout, with a complete lack of excess decoration and fancy trimmings. The job looks, and is, expensive. The cost to the photographer for such mounts is not less than one dollar apiece.

The second method is that of the photographers who cater to the best of the middle class trade. They feature, as a rule, a smaller size of print and mount. The mounts are simple and in good taste, sometimes embossed or bevelled. These mounts are comparatively

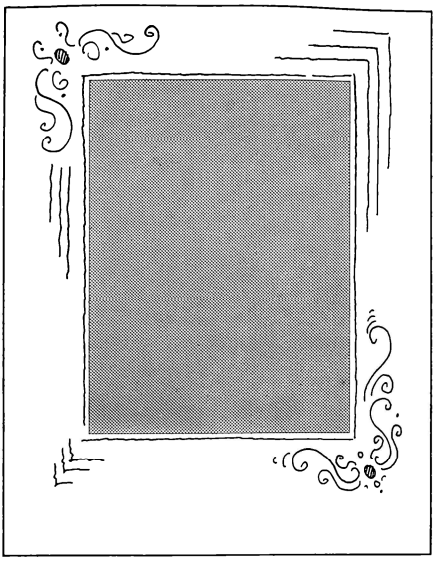


Figure 76
Commercial mounts like this are an unhappy hangover from 1903.

inexpensive, and cost the photographer in the neighborhood of ten or fifteen cents apiece.*

The practice of the best studios is to use simple mounts with little or no decoration. But the dealers' catalogues continue to offer as mounts some of the weirdest confections that ever assaulted the human eye, unhealthy looking brown things, tortured into strange shapes, curiously cut, bent and deckle-edged. They are made to imitate all sorts of irrelevant materials—leather, wood, canvas and birch bark. They are adorned with various scrolls, seals and insignia (Figure 76).

Mounts of this sort were in favor in the early nineteen-hundreds. Nowadays there is no excuse for a photographer using such materials —unless he wishes to insult his patrons.

*A typical mount of this class is the "Colony JM-1," manufactured by Taprell-Loomis and Co.

Chapter Four

Signatures and Titles

An exceedingly important detail in the presentation of a picture is the artist's *signature.* Much is revealed of the quality of the artist and his attitude toward his work by his handling of this little detail. Badly handled, a signature will be a disturbing element and will betray the artist's uncertain taste or juvenile ostentation. Well handled, a signature becomes an integral part of the scheme of presentation and even of the composition of the picture itself.

Two Types of Signature

There are two general types of signature. They are very different in their effect and connotation and require quite different handling. These are the two types:

1. The written signature.
2. The formalized signature.

The first is simply the straightforward signing of the name, as you would put your name to a check, letter, or any other document that you acknowledge. The general type is shown in Figure 77. Simplicity and sincerity should be the connotation of this form of signature. There should never be any suggestion that the signature has been laboriously concocted. Juvenile and plebian bad taste are indicated by a flamboyant or showy signature (see Figure 78).

A signature of the written type is intended for use only on the

Figure 77. Written signature should be plain and straight-forward.

Figure 78. Showy signature connotes juvenile egotism and plebian bad taste.

Figure 80. Formalized signature may be used on print.

mount or step-off. A *written* signature should *never* be placed on the picture itself. This usage is characteristic of old-fashioned and small-town portrait studios, and is weirdly out of place with any photograph of pictorial pretensions (see Figure 79).

The second type, the formalized signature, is illustrated in Figure 80. Here an effort is made to get away from the informal and casual effect of the written signature. The name is, instead, presented in a form compact and decorative. The last name is frequently used by itself in this type of signature—"smith" instead of "John Smith." Indeed, the name is occasionally cut down to a mere symbol—such as the butterfly sign of Whistler or the familiar monogram of Albrecht Dürer. (However, the use of such cryptic symbols is not advocated for those who have not attained to the secure artistic rating of the artists just mentioned. For the average pictorialist, the use of a monogram to sign photographs is a foolish affectation.)

In distinction from the written signature, the formalized signature is intended for use directly on the print. It thus becomes an integral part of the composition of the picture itself. So the *placing* of the formalized signature is a matter of much importance. A study of the wood-engravings of Dürer will reveal the care with which this master dealt with this problem. Never is the monogram placed twice in the same spot, and it is always placed right.

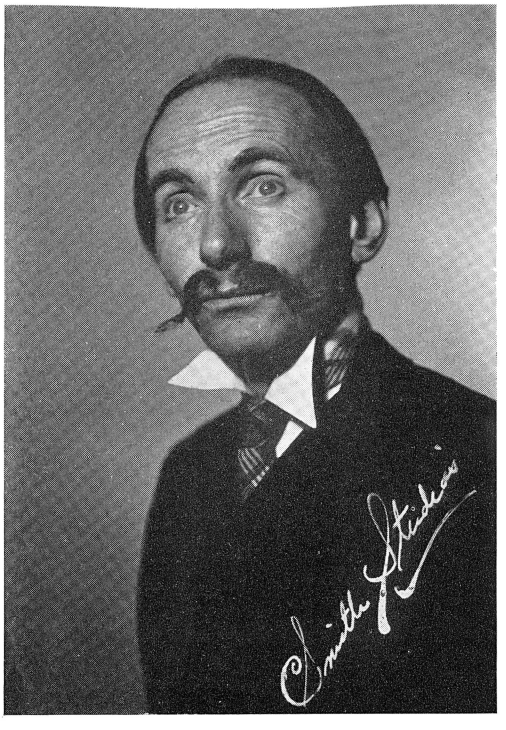


Figure 79
"Henry Botts, Esq." Never place written signature on print.

The tone relationship of the signature to the picture is also an important detail. Generally speaking, the signature should be on the light side of the medium tones. *Never* should it be as dark as the darkest part of the picture. On the other hand, the signature should not be so light in tone that it becomes difficult to read.

For making a formalized signature it is best to use a carbon pencil, since it most closely matches the photographic half-tones of the print. For a written signature on the mount or step-off, however, an ordinary lead pencil is to be preferred. Never use any sort of color in signing a black and white print.

Position of the Formalized Signature

Any thorough consideration of this matter would lead us far afield into problems of composition; but the following suggestions on the placing of the formalized signature may prove helpful.

Figure 81. "Conchita." Showing use of formalized title and signature.

1. While the signature must conform to the image and be definitely *related* to the image, it must, on the other hand, be readily *separable* from the image. There must be no confusion about which is image and which is signature.
2. Therefore, the signature should never be placed on any *structural* part of the image. It should be placed only in a part of the picture that is completely free of any subject interest. It should be placed on the background only when the latter is severely and conventionally plain (see Figure 81). In a landscape, it should not be placed on the sky, even though the latter is free from cloud or other detail, because the sky is a structural part of the whole.
3. Nor should the signature *overlap* any part of the image.
4. It generally introduces confusion when the signature begins or ends right at the edge of the image. Instead, definitely separate the signature from the image.
5. In the case of a portrait with profile or three-quarter angle, keep the signature always *behind* the face.
6. Flamboyant aggressiveness in a signature is bad, of course. But shrinking modesty is equally annoying. So don't, in a spasm of self-effacement, flatten the signature against the bottom or let it be crowded to the edge of the picture.

Placing of Signature and Title

The standard position for a signature on the mount or step-off is immediately below the print, with the right hand end of the signature in line with the right edge of the print (see Figure 82). It is perhaps scarcely necessary to remark that there should be *no* signature written on the mount if there is already a formalized signature incorporated in the picture.

The written signature usually remains in the position described above when a title is added. Sometimes the title is lined up with the *left* side of the print, but the commoner and better practice is to

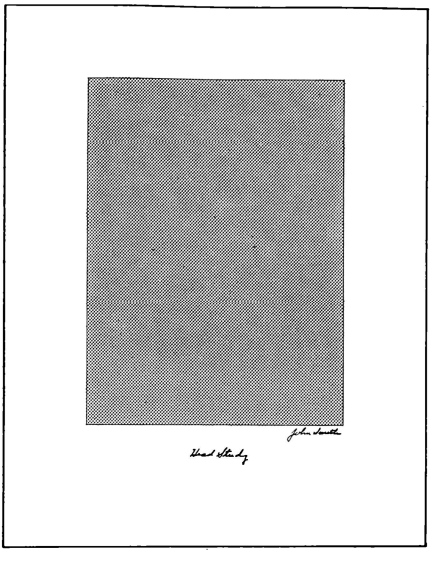


Figure 82. This is the accepted way of placing title and signature on the mount.

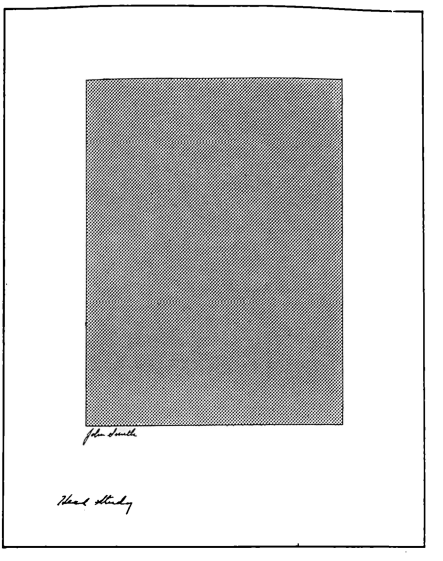


Figure 83. A bad arrangement of title and signature.

center the title, placing it slightly lower than the signature (Figure 82). Of the unfortunate results of badly combining signature and title, a typical example is shown in Figure 83.

The Formal Title

It is occasionally effective to incorporate the title into the print itself. This has been done in Figure 81. Prints that are titled in this manner should be rather formal in composition, and have a perfectly plain background.

The combining of lettering with a picture is a very tricky matter, and, unless it can be correctly done, lettering is much better omitted. Such lettering must be executed with a nice sense of space values, it must be photographic in quality, and it must be properly subordinated to the central image.

The general procedure is as follows: Lay in freehand guide-lines very lightly with a lead pencil. Then, in the same way, indicate the spacing of the letters and lightly sketch them in. Trace gently over

these sketched outlines with the BB carbon pencil, improving and rectifying the letters as you go. Now trim your BB pencil to a sharp point. Hold it vertically, and bearing down heavily on it, go over the letters again to obtain a strong, clean-cut outline. Finally, with the kneaded eraser, go lightly over all the lettering. The eraser does three things: it removes the guide-lines; it lightens the letters to the desired tone; it slightly blurs their contours, giving them a photographic quality. Continue work with the eraser until the letters are so lightened in tone that they seem to lie on a plane *behind* the head of the portrait.

Unless you go about things correctly, you will find that your formal title draws the eye more strongly than the picture it is applied to. All possible means must be employed to keep the title properly subordinated. Two rules may be suggested for securing this necessary subordination of titles.

1. Avoid ornate or elaborate design in the letters used, or any other flourishes that detract from the domination of the central image.
2. Whenever possible, let the first or last letter of the title be partially obscured by the image. By this procedure the lettering is placed in another plane in the picture, and is indicated to be of lesser importance. (Note, in this regard, the placing of the title on Figure 81.)

Chapter Five

Framing

Any picture that you place any value on should be shown under glass. The glass protects it from dust and damage and greatly increases its brilliance. There is also a consideration of showmanship involved: the use of protecting glass increases the impression of value and thereby raises the picture in the esteem of the beholder.

A frame is naturally demanded when glass is used, as a means of holding the glass in place. But it has an important pictorial function also. Along with the mount, it serves to help create the necessary "isolation" required for the full appreciation of a picture. Like the mount, it must be definitely *subordinate* to the picture. This requirement means that, for a photograph, the frame must be quite narrow and inconspicuous. As a minor and delicate art, a photographic print cannot support a heavy and ostentatious frame which a major work of painting can carry off triumphantly.

Therefore, avoid (for an 11 x 14 print) any frame that is much over a quarter of an inch wide. Steer clear of bright colors and of shiny silver and other metallic finishes. And avoid those gorgeous contraptions of red morocco and gilt, in the midst of which one occasionally sees a photograph, dejected and forlorn, like a dish-rag dropped in the middle of the hall at Versailles.

Wooden Frames

There are only two forms of frame which are really feasible for use with photographs. One of these is the wooden frame—made of a narrow and simple moulding. For an 11 x 14 print the moulding should not be wider than a quarter of an inch. Use no colors that draw attention to the frame itself. For a warm print, a medium brown frame is the best. Choose a dark gray for the average black-and-white print. For a low-key print, a black frame is sometimes effective.

From a pictorial point of view, the thickness of the frame is frequently an advantage, since it gives increased "isolation."

The wooden frame, however, is subject to certain objections. It is cumbersome and easily damaged. Wooden frames do not stack to advantage; so they do not very well serve the photographer who wishes to store a large number of framed prints. In the long run, the wooden frame is rather expensive, and, except at *additional* expense, can be had only in a few standard sizes.

Framing in Passe-Partout

Except for something fairly permanent, passe-partout is by far the best medium for framing photographic prints. For the average photographer, who is constantly framing, re-framing and unframing his pictures, it is certainly the logical method to use. It is inexpensive and very effective. In use, passe-partout is a very flexible material, being adaptable to prints of any size and capable of considerable variation in width.

The gummed paper tape known as passe-partout comes in twelve-yard rolls in a standard width of seven-eighths of an inch. It is available in a considerable variety of colors, but, for most photographic uses, three colors will suffice: *pale ivory* for delicate and high-key prints, *neutral gray* for average prints, and *black* for prints with a preponderance of dark tones. To these may be added, if you wish, *dark brown* for warm or sepia toned prints.

For framing in passe-partout, three elements are necessary:

1. The mounted print.
2. Glass of correct size.

3. Cardboard backing.

Fourteen-by-eighteen is a standard size for glass, and is the best size to use with an eleven-by-fourteen print. You will find it advantageous, if you are using much glass, to buy it by the case instead of by the piece. The saving in cost is considerable. Do not let yourself be inveigled into buying "picture glass," which is quite expensive and offers little advantage. Ask, instead, for Grade A single strength window glass.

Before using, the glass must be thoroughly cleaned and well polished. This is essential for good workmanship. Few things look more careless than a thumb print under the glass. For cleaning the glass use either soap and water or the special solvent known as "Windex." In either case, polish well with a soft, lint-free cloth.

For the backing in framing with passe-partout, use the #25 chip-board. This is a heavy, gray-brown cardboard. Nothing lighter in weight should be used. #25 is stiff and substantial, but not too heavy to be cut with a good trimmer.

Application of Passe-Partout

Trim your chip-board backing to exactly the same size as the glass and the mount of the print. The three elements must be *precisely* the same size. Any discrepancy leads to a sloppy looking result.

When the three elements are ready, assemble them, glass uppermost, and lay them before you on the work-table (Figure 84). Get the edges into perfect alignment. Then pull the whole assembly forward until one side hangs over the edge of the table by about an inch. Place a good-sized weight on them—a large book or something of the sort will serve for this purpose.

You are now ready to apply the passe-partout. This is a very tricky business, ruinous to temper and philosophic calmness. I describe it step by step.

1. Unwind the end of your roll of passe-partout. Measure roughly and tear off a piece a couple of inches longer than the edge of the glass.
2. Moisten the gummed side of the passe-partout thoroughly with your tongue. Those squeamishly inclined

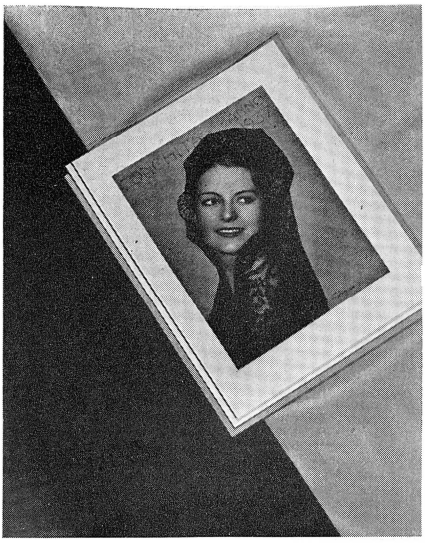


Figure 84. Glass, print, and chip-board backing are assembled, glass uppermost.

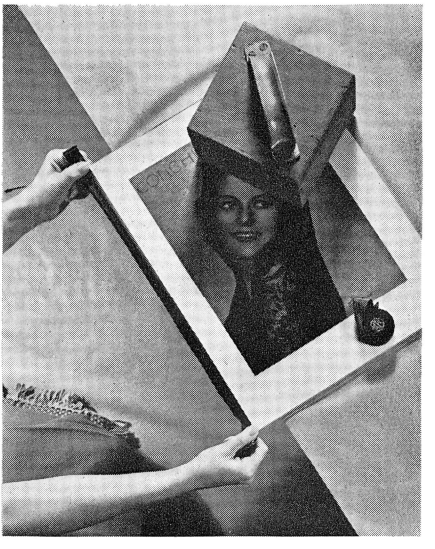


Figure 85. When left end is attached, pull passe-partout taut and attach right end.

may prefer to use a dampened sponge, but I advocate the more accessible and natural source of moisture. I have used it for twenty years, and have sustained no damage from the pounds of mucilage I have absorbed during that period. You must learn to recognize the right degree of wetness: if the passe-partout is too dry, it may adhere to the glass but not to the chip-board backing. If it is made too moist, the adhesive loses its strength.

3. Hold the passe-partout, with the wet side down, between the thumbs and forefingers of the two hands.

4. Attach the left end of the passe-partout to the glass only. Since the tape is opaque, you cannot see how much it overlaps the edge of the glass. You must learn to feel, with the end of your thumb, the extent of the overlap. A quarter of an inch is about the right amount.

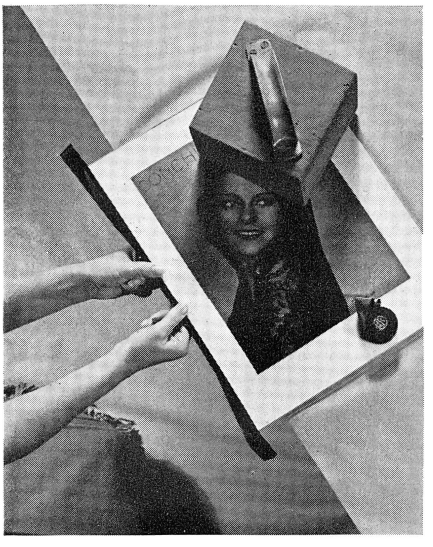


Figure 86. Thumbs are used to attach passe-partout to glass along whole length of side.

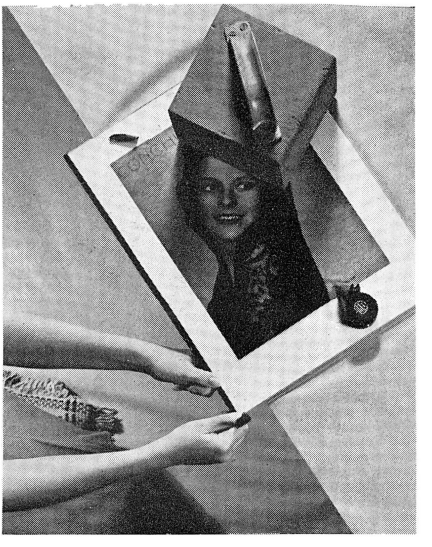


Figure 87. Projecting ends of passe-partout are torn off, even with glass.

5. When the left end is attached, pull the tape taut, and attach the right end in the same manner (Figure 85). Feel the width of the overlap with your right thumb and make sure that it matches the left end. In case of error, the right end of the tape may be quickly loosened and re-attached correctly.
6. You now have both ends attached to the glass. Now bring your thumbs together in the middle and, pressing down on the tape, move them away from each other back to the corners (Figure 86). You thus attach the tape to the glass along the whole length. At the same time, turn down the projecting edge of the passe-partout with the forefingers.
7. With the left thumb and forefinger, pinch the three elements together at about the middle of the projecting end. With the right forefinger, turn under the edge of

the tape and attach it to the cardboard backing all the way to the right corner. Then pinch with the right thumb and forefinger and finish attaching the other half of the tape with left hand.

8. Tear off projecting ends of the passe-partout, even with the glass (Figure 87).

9. You have now completed one side of your picture. Now turn the whole assembly clear around, so that the opposite side projects over the edge of the table. Proceed in the same manner with this side.

10. When passe-partout is applied to opposite edges, proceed with the remaining edges of the picture.

Analyzed and described step-by-step, the procedure may sound alarmingly complicated, but it is quite simple in practice. Experimentation is necessary, of course, to get the hang of it. It is a rapid process when you know how. A reasonably skilled worker should be able to complete the application of passe-partout to an 11 x 14 print in a couple of minutes.

Chapter Six

Prints for Salons

The secret ambition of most photographers and the grand finish of all print finishing is to have one's picture put up on the wall and admired by gasping and incredulous multitudes. Hence, we have salons. So it seems logical to include in this book a few remarks on how to prepare pictures for salons and what to expect from those quaint creatures, the jurors.

Sooner or later in every photographer's experience there comes the day when he receives through the mail a handsomely printed announcement reading something as follows:

THE FIFTH ANNUAL SALON OF THE PITTSVILLE CAMERA CLUB. ENTRANCE FEE ONE DOLLAR.

With high hopes or cynical misgivings you bundle up several of your best prints, fill out the attached entrance blank, enclose a dollar bill as requested, and send them all off to Pittsville. In due time you either receive them back with perfunctory regrets and a word of thanks, or else you learn (to your astonished gratification) that they have been accepted.

Beside yourself, about a thousand other photographers have hopefully sent along examples of their work. What has been going on in Pittsville meanwhile? What is the system used to sort through

this mass of pictures and determine which are worthy to adorn the wall of the Pittsville Salon? And who are the great minds that administer the system?

* * * * * * * * *

For several days preceding the opening of the Salon, a small harassed group of people have been circulating about a room lined with prints, placing on each their badge of acceptance or token or disapproval. Finally they have discovered themselves involved in the usual emergency. They have accepted more prints than the galleries of the Salon can accommodate, and consequently are obliged to find reasons for throwing out a third of their selection. They are now engaged in a somewhat distracted huddle, for they must eliminate two hundred prints before dinner time. Let us examine these people who control the destinies of so many pictures.

There is Miss Kite, who has been on the jury ever since there was a salon in Pittsville. She is an ex-school teacher who gives to the affairs of the Camera Club the same grim enthusiasm that she gives to the Girl Scouts of Pittsville. She thanks God and her ancestors that she is from Boston. At the latter city she acquired her art training. She no longer does water colors, but is fond of taking her antiquated Kodak to the park and taking pictures of the swans. She is much disturbed by nudes, but a bit of sentiment or still-life is enthusiastically clasped to her chaste bosom.

Her best friend in the Camera Club is Mr. Blossom, another member of the jury. Mr. Blossom, a small gray gentleman, is very loquacious and regrettably given to gossip. He recklessly admits to a personal interest in the nude—provided, of course, that the model's eyes are modestly downcast and her figure is discreetly mitigated by diffusion and crepe de chine. He shares Miss Kite's enthusiasm for swans.

The third member of the jury is Mr. Spraddle. He represents the Chamber of Commerce point of view. As the chief promoter of the Pittsville Salon he has dedicated himself to letting the world know that "We here in Pittsville appreciate the finer things." Mr. Spraddle is red of face, hearty of manner, and prides himself upon being

"broad-minded." To the disputes of the other members about such matters as Pure Photography and Processed Photography, he replies, "I don't know anything about that, but I know what I like." Among the things that he likes are dogs, children blowing bubbles, nudes (of the boudoir variety), and candid camera pictures.

John Easton is the fourth member. He knows photography from alpha to gamma. To him the principal interest in photography lies in what goes on inside the camera and within the dark-room. The ideal end product of these photo-chemical processes he finds in a glossy print of wiry sharpness. Any evidence of control, any of the "controlled processes," he regards with disdain, if not with loathing. (Few people know that he has a bromoil press at home gathering dust in the attic.) His most frequent comment is, "What a pity it wasn't made on glossy paper." Naturally, with his predilection for the purely laboratory side of photography, Mr. Easton is less concerned than the others with subject matter, but he is apt to express a preference for skyscrapers, steam shovels and arrangements of sugar cubes (provided they are presented in clean glossy prints).

Morton Williamson is a representative of the "controlled" school of photography. He welcomes carbros, bromoils and gum prints. He dismisses Mr. Easton's glossy prints with disdain (and a little envy of their technical competence). He distrusts violent modernity in pictures, and displays more than a little nostalgia for the ways of the old masters. In his choice of pictures, he shows a penchant for rather sensational subject matter, for scenes of carnage and torture, and for nudes.

The last member of the jury is Mr. Verdigris. Mr. Verdigris is an artist that Mr. Spraddle has drafted in order to give an arty flavor to the Pittsville Salon. He participates very little in the deliberations of the jury, but mostly mopes in the corner, nursing a very foul pipe. When pressed for an opinion, he gives a snort which clearly says, "Pfui, photography!" and then rasps, "No composition!" To which Mr. Blossom protests, "No composition? Oh, come, come, Mr. Verdigris!" And Mr. Spraddle hastens to remark placatingly, "Well, of course I don't understand such things, but it seems to me to be a nice

little picture." Miss Kite says, "I agree with Mr. Verdigris. I remember that in Boston they said that, in a pyramidal composition, the apex should always come above the center of the picture." Mr. Easton says, "Anyway, there is a very poor rendering of the flesh textures. Now, with a little more metol in the developer—" And Mr. Williamson comments, "It would be a good picture if he would add this and eliminate that."

* * * * * * * * *

And so the jury muddles through to the Fifth Annual Salon of the Pittsville Camera Club. There is no gainsaying the sincerity and honesty of intent of Miss Kite and the Messrs. Blossom, Spraddle, Easton, Williamson and Verdegris; but as a group they are completely lacking in any unity of purpose or any common basis of judgment. Williamson is the only one who knows much about processes, Easton is the only one with any scientific background, and Verdegris is the only one who brings up the matter of composition. Subject matter is the only possible meeting ground, and here each one is swayed by his own personal predilections.

The situation here outlined is not exaggerated or concocted. I have, in my time, served on a large number of juries, and I have frequently seen just such people arrive at just such makeshift conclusions. It is fact that must be recognized—and accepted philosophically: this is how juries are. They aren't always up to their job, and they are almost always swamped with prints and vastly overworked. Strange people sometimes get onto juries—and they arrive at strange conclusions. But there seems to be little that can be done about it: no adequate substitute has been discovered for the overworked, much-maligned jury. So—if you are going into salons, you will have to learn to take juries as they are.

Under these conditions, it is of course impossible to indicate any general rule for impressing juries. As to subject matter, each member has his own individual set of likes and dislikes: and he is bound to be swayed by them—whether he admits the fact or not. As to processes, each has his own pet method.

But, out of my own jury experience, I am able to suggest a few

small matters that invariably please a jury and unconsciously incline them to regard your picture more benevolently. They are obvious things, yet they are all too often disregarded. They are simple gestures that convey an impression of consideration for the comfort of the jury and at the same time suggest that your print is a choice item.

1. *Submit only spotless prints.* No matter how good your print may be otherwise, carelessness in this matter weighs heavily against you. It suggests either technical incompetence, or else that you don't consider this particular salon worth troubling about.
2. *Let your mounting be clean and meticulous.* I have seen dozens of prints submitted, mounted askew and with paste smeared over the mount. Such sloppiness is an affront to the jury. If a print comes back from one show with the mount soiled, be sure to remount it before you send it out again.
3. *Keep your titles and signatures legible.* The jury hasn't time to call in a handwriting expert or to figure out acrostics.
4. *Give your prints secure protection in shipping.* A print which is carelessly wrapped for shipping suggests that the artist himself doesn't set very high value on it.
5. *Don't send the maximum number allowed.* Juries are always overworked and beset with the problem of dealing with too many prints for the available wall space. So they view with gratitude any effort to lessen their labors. To send the absolute maximum number allowed suggests a little too much pushful eagerness and gives the impression that you bundled up everything you had on hand instead of your carefully chosen best.

These are the best ways to make friends with the jury and influence them to your advantage. Now let me offer a few suggestions regarding your general attitude toward salons and their problems.

In the first place, when you start out to crash the salons, begin at the top. Your prints, let us say, have been well spoken of by your

local camera club and you are desirous of branching out a bit. Don't, at this point, send your prints away to some small-town exhibit. Go after the big shows instead—such as those in Pittsburgh, New York, London, Chicago, Los Angeles and San Francisco. Your chances of getting in are admittedly slimmer, but it means something when you do. And there are enough big salons to keep you busy sending your prints about.

Don't, as a rule, make a print for the specific purpose of sending it to a salon. Such prints, concocted for a special purpose and a special public, seldom turn out very well. So, instead of *making prints for salons,* simply *make prints* and send the salons the best of what you have.

Avoid any hint of the wholesale habit. Don't flood the market with your prints. To broadcast twenty copies of the same print, as some of our exhibitors do, is bad publicity in the long run. Such practice intimates very strongly that you set a higher valuation on quantity than you do on quality. There is no special virtue in getting into a large number of salons; indeed, it suggests that your prowess is rather more athletic than pictorial.

After you have exhibited a few times, you will undoubtedly receive communications from other workers who want to exchange prints with you. Be rather chary of being drawn into such deals. Don't swap for the mere sake of swapping. Never indulge in an exchange unless you really *want* the print that is offered to you.

The question of gifts and valuation of prints is another matter that you will have to deal with if you meet with any sort of success in exhibitions. Various galleries and collectors will ask you for copies of your prints. The question is—how much. The safe rule in such cases is this: never charge a "merely nominal" price. Either make a generous gesture with an outright gift, or else ask a good substantial fee. Never make the mistake of charging merely "for materials," for that implies that your print has little value beyond that of the materials.

Appendix A

Abrasion-Tone and the Texture Matrix

About three years ago I released for general use my Texture Matrix, which I had been using in my own work for many years.

At the time when I made this device public, I was not able to describe one important detail of its use. This detail involved the employment of Abrasion, concerning which I had then written nothing, and which, indeed, at that time, I did not intend to make public.

My "Texture Matrix" is a hand-etched, non-mechanical screen. It consequently contains some irregularities, inevitable in a non-mechanical device, which must be corrected by use of Abrasion. These irregularities show themselves on the textured print in two

Figure 88
Overlapping lines in Texture Matrix.

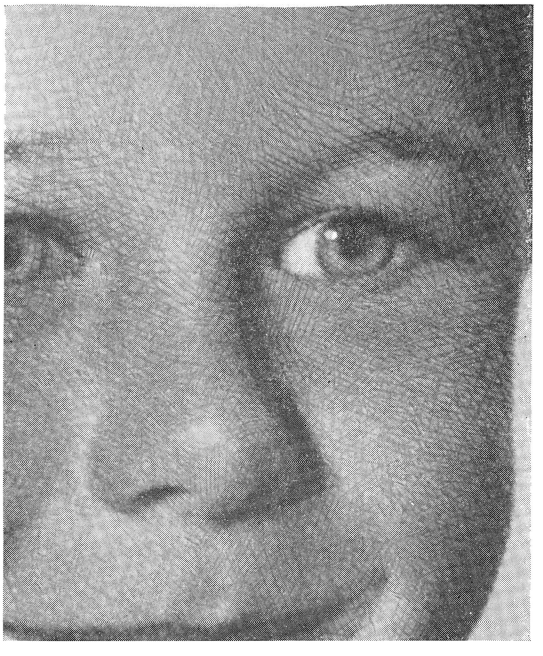


Figure 89
Irregularities of texture lines corrected by Abrasion.

forms:

1. An occasional clumping together of the texture, due to overlapping lines.
2. Occasional single lines of texture, which persist in areas that should be nearly white and quite free from texture.

Both these irregularities are shown in Figure 88, a considerably enlarged section of a textured print. The clumped and overlapping lines of texture are readily obvious at several points. Note also the single hair-line of texture that crosses the white of the eye.

These both are readily corrected by use of the razor blade. A few strokes clear out the clumped lines and take out the line across the eye (Figure 89). Be careful always to make your strokes in the same direction as the texture lines.

All textured prints should be carefully checked through and cleared of all such minor irregularities.

Fuller details concerning the use of the texture screen will be found in the appendix to *Projection Control.*

Appendix B

Black Borders by Projection

Instead of a black step-off, with a print featuring heavy dominant blacks, it is sometimes an interesting variation to use a photographically printed black border.

This is easily supplied during the projection of the print. The procedure is as follows:

Project the print as usual. When the exposure is complete, cover the lens with your red-orange filter. Remove the negative from the carrier and open up the lens to the fullest extent. Now, with a rectangular piece of cardboard somewhat larger than your print, shield the entire surface of the print except for a narrow border along the top and right edge. Be sure to hold the card so that it is accurately parallel to the edges of the printing frame. Hold the card in position with one hand, and with the other remove the red-orange filter from the projector lens. Give ample exposure, so as to insure complete black. Replace the filter on the lens and adjust the card so that the exposed border is along the bottom and left edge of the print. Once more remove the filter and expose amply. This completes the border, and the print is now developed as usual.

If you use a printing frame you will note a slight diffusion at the edge of the border. This effect is due to the thickness of the glass. This barely perceptible diffusion will be found to be more pictorially pleasing than the harsh, mechanically ruled border that appears when the cardboard is placed in direct contact with the printing paper.

WILLIAM MORTENSEN offers a full curriculum of individual instruction in his distinctive technique which is of especial interest to advanced amateurs and professional photographers. The many beginners who also study with him are spared bewilderment and loss of time by the simplified, logical methods and procedures of the Mortensen School. More than six hundred students in the past ten years have taken these courses, which cover all branches of Pictorial and Portrait Photography, with particular emphasis on the Miniature Negative. They include the special processes of Bromoil, Color and Paper Negative with advanced treatment of Character, Dramatic and Landscape Photography.

The student receives his training through demonstration, supervised practice, and criticism of assignments, covering all points in the System.

A large gallery of salon prints, including the work of both Mr. Mortensen and many of his distinguished students, provides inspiration and opportunity for study. For further information, you are invited to call at the Studios, or to address—

William Mortensen, Laguna Beach, California.